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NATURAL HISTORY

OF

BIRDS, FISH,

INSECTS, AND REPTILES.

EMBELLISHED WITH

UPWARDS OF TWO HUNDRED ENGRAVINGS.



IN SIX VOLUMES.



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NATURAL HISTORY

OF

BIRDS, FISH, REPTILES, &c.

OF THE SPARROW KIND.

UNDER this denomination all naturalists have concurred in classing that race of birds from which man derives so much pleasure by the delightful harmony of their little throats; they seem formed for his entertainment, and, as if conscious of it, they always reside in the vicinity of his society. It is very true, indeed, that independently of any attachment to man, two very essential reasons may be assigned for their preferring his neighbourhood to the still gloom of the forests, and the cultivated grounds to dreary plains; namely, the supply of food and security from their ene-

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mies. This tribe of birds consists of the smallest order of the feathered race, in which the black-bird, may claim the foremost rank in point of size, and from him they gradually descend to the humming bird, which, from its minuteness, seems to unite this part of animated nature with insects, in the same manner as the ostrich does with quadrupeds. Thus weak from size, and defenceless by nature, the little songsters dread residing in the forests where the ravenous tribes live in sullen security, and prowl about for prey; they fly from those, their most merciless persecutors, and take refuge near the habitations of men, whither they feel a presentiment their foes never venture to approach but by stealth; besides this, their principal food consists of grain, fruits, and particularly insects; the two former are not to be procured in uninhabited deserts, and the latter are always found in the greatest abundance in cultivated grounds.

The generality of birds, although so well formed by nature for changing place with rapidity and ease, are for the most part contented with the places where they were bred, and by no means exert themselves in proportion to their endowments. The rook, if undisturbed,
will

will never forsake its native wood ; the black-bird constantly adheres to its accustomed hedge, and if ever they change, it is only from motives of famine or fear. The red-breast, or the wren, seldom leaves the field where it has been brought up, or where its young have been excluded ; even though hunted, it flies along the hedge, and seems fond of the place with an imprudent perseverance. The fact is, that all these small birds mark out a territory to themselves, which they will permit none of their own species to remain in ; they guard their dominions with the most watchful jealousy ; and we seldom find two males of the same species in the same hedge together. There are some sorts, however, called Birds of Passage, which remove to warmer or colder climates, as the air, or their peculiar constitutions, renders it necessary. Of this migration, and the concomitant circumstances, a modern author has given the following curious particulars :

“ There are,” says he, “ several persons
“ who get a livelihood by watching the seasons
“ when our small birds begin to migrate from
“ one country to another, and by taking them
“ with nets in their passage. The birds are
“ found to *fly*, as the bird-catchers term it,
“ chiefly

“ chiefly during the month of October, and
“ part of September and November. There
“ is also another flight in March, which is
“ much less considerable than that in autumn.
“ Nor is it less remarkable, that several of
“ these species of flight-birds make their ap-
“ pearance in regular succession. The pippet,
“ for instance, begins its flight every year about
“ Michaelmas, when they are caught in great
“ numbers. To this the wood-lark succeeds,
“ and continues its flight till towards the mid-
“ dle of October; other birds follow, but are
“ not so punctually periodical; the green-finch
“ does not begin till the frost obliges it to seek
“ for a change. These birds, during those
“ months, fly from day break till twelve at
“ noon ; and there is afterwards a small flight
“ from two till night. Such are the seasons of
“ the migration of the birds, which have been
“ usually considered as stationary, and on these
“ occasions they are caught in great abun-
“ dance, as they are on their journey. But
“ the same arts used to allure them upon other
“ occasions would be utterly fruitless, as they
“ avoid the nets with the most prudent circum-
“ spection. The autumnal flight probably
“ consists of the parents conducting their new-
“ fledged

“ fledged young to those places where there is
“ sufficient provision, and a proper tempera-
“ ment of the air during the winter season;
“ and their return in spring is obviously from
“ an attachment to the place which was found
“ so convenient before for the purpose of nest-
“ ling and incubation.

“ Autumn is the principal season when the
“ bird-catcher employs his art to catch these
“ wanderers. His nets are a most ingenious
“ piece of mechanism, being generally twelve
“ yards and a half long, and two yards and a
“ half wide, and so contrived as to form a flat
“ position to rise on each side, and clap over
“ the birds that are decoyed to come between
“ them. The birds in their passage are al-
“ ways observed to fly against the wind; for
“ example, if it is westerly, the bird-catcher
“ who lays his nets most to the east is sure of
“ the most plentiful sport, if his call-birds are
“ good. For this purpose, he generally car-
“ ries five or six linnets, two gold-finches, two
“ green-finches, one wood-lark, one red-poll,
“ and perhaps a bull-finch, a yellow hammer,
“ a tit-lark, and an aberdavine: these are
“ placed at small distances from the nets in
“ little cages. He has besides what he calls
“ his *flur-birds*, which are placed upon a move-
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“ able perch, which the bird-catcher can raise
“ at pleasure by means of a string ; and these
“ he always lifts gently up and down as the
“ wild bird approaches. But this is not
“ enough to allure the wild bird down ; it
“ must be called by one of the call-birds in
“ the cages ; and these, by being made to
“ moult prematurely, by being kept in a
“ warm place, call louder and better than
“ those that are wild and at freedom. There
“ even appears a malicious joy in these call-
“ birds to bring the wild ones into the same
“ state of captivity, while at the same time
“ their call is louder, and their plumage
“ brighter, than in a state of nature. Nor is
“ their sight or hearing less exquisite, far ex-
“ ceeding that of the bird-catcher ; for the in-
“ stant the wild birds are perceived, notice is
“ given by one to the rest of the call-birds,
“ who all unite in the same tumultuous ecsta-
“ cy of pleasure. The call-birds do not sing
“ upon those occasions as a bird does in a
“ chamber, but incite the wild ones by short
“ jerks, which, when the birds are good, may
“ be heard at a great distance. The allure-
“ ment of this call is so great, that the wild
“ birds hearing it are stopped in their most
“ rapid flight ; and, if not already acquainted
“ with

“ with the nets, light boldly within twenty
“ yards perhaps of the bird-catcher, and on a
“ spot which they would otherwise have quite
“ disregarded. This is the opportunity wished
“ for, and the bird-catcher pulling a string,
“ the nets on each side rise in an instant, and
“ clap directly down on the poor unsuspecting
“ visitants. Nay, it frequently happens, that
“ if half a flock only are caught, the remain-
“ ing half will immediately afterwards light
“ between the nets, and share the fate of their
“ companions. Should only one bird escape,
“ this unhappy survivor will also venture into
“ danger till it is caught ; such a fascinating
“ power have the call-birds.

“ Indeed it is not easy to account for the
“ nature of this call, whether it be a challenge
“ to combat, an invitation to food, or a pre-
“ lude to courtship. As the call-birds are all
“ males, and as the wild birds that attend to
“ their voice are most frequently males also, it
“ does not seem that love can have any influ-
“ ence in their assiduity. Perhaps the wild
“ females, in those flights, attend to and obey
“ the call below, and their male companions
“ of the flight come down to bear them com-
“ pany. If this be the case, and that the fe-
“ males have unfaithfully led their mates into

“ the nets, they are the first that are punished
“ for their infidelity ; the males are only made
“ captives for singing ; while the females are
“ indiscriminately killed, and sold to be served
“ up to the tables of the delicate.

“ Whatever be the motives that thus arrest
“ a flock of birds in their flight, whether they
“ be of gallantry or of war, it is certain that
“ the small birds are equally remarkable for
“ both. It is, perhaps, the genial desire that
“ inspires the courage of most animals ; and
“ that being greatest in the males, gives them
“ a greater degree of valour than the females.
“ Small birds being extremely amorous, are
“ remarkably brave. However contemptible
“ these little warriors are to larger creatures,
“ they are often but too formidable to each
“ other ; and sometimes fight till one of them
“ yields up his life with the victory*. But
“ their

* Buffon says, that they fight desperately for the females. There are few birds so amorous, or so vigorous in love, as the sparrow. They have been known to copulate twenty times successively, and always with the same ardour, the same flutterings, the same expressions of pleasure ; and what is singular, the female appears to be the first weary. In their amours however the sparrow seems to be guided by no sentiment : there are no preliminaries, no caresses, no selection.—Compare the loves of the pigeon with that of the sparrow, and you will see almost every shade between physical and moral desire.

“ their contentions are sometimes of a gentler
“ nature. Two male birds shall strive in song,
“ till, after a long struggle, the loudest shall
“ entirely silence the other. During these
“ contentions, the female sits an attentive si-
“ lent auditor, and often rewards the loudest
“ songster with her company during the sea-
“ son.”

Much has been written upon the subject of migration, without any author being able to substantiate any fact, beyond the general one, that as the winter season approaches, every bird resorts to those places where its food is to be found in the greatest plenty ; and that they always return at the seasons of incubation to those parts, where their young, when hatched, have the greatest chance of not only being supplied with the most congenial food to their constitutions, but also in the greatest abundance.

But with regard to that race which entertain man with their melody, we find the faculty of singing, with a very few exceptions, is confined to the male, while the principal fatigues attendant upon generation fall to the lot of the female, for she has the task of sitting almost continually during the time of incubation, and almost the whole care of nursing her nestlings until they are capable of providing for themselves.

selves. It is true, indeed, that the male will assist during this period, with providing provisions, not only for her while sitting, but afterwards for their offspring, and endeavour to alleviate her fatigue by the spirited exertions of that song with which nature has endowed him. This melody serves first as a note of blandishment to attract her affections: it then serves as a note to delight her during the time of her incubation; and it serves still farther as a note of security, to assure her that no danger threatens to molest her. The male, while his mate is hatching, sits upon some neighbouring tree, continuing at once to watch and to sing, and while his voice is heard, the female rests in confident security; but if there be the smallest appearance of danger, he suddenly stops; and this is a most certain signal for his mate to be on her guard against an approaching enemy. These little songsters, who chiefly live by committing their depredations on corn and fruits, as though conscious that man considers them as unwelcome intruders upon the fruits of his labours, in making their nests use every art they are capable of to conceal them from his sight. In the office of making their nests they are both employed; the female is the principal architect, while the male chiefly employs

plays himself in furnishing materials; these materials, in the first instance, mostly consist of small twigs, which they contrive to twist round by way of a foundation, filling up the interstices with clay; the insides are, however, composed of more warm and soft materials, as hair, wool, &c. and which is probably necessary to give that warmth to their eggs which the smallness of their bodies might not be enabled to bestow for the purposes of generation.

In the choice of a place for their nest nothing can exceed the cunning which the little owners employ to conceal it. If it be built in bushes, the pliant branches are so disposed as to hide it entirely from the view; if it be built among moss, nothing outwardly appears to shew that there is a habitation within. It is always built near those places where food is found in greatest abundance; and being completed they are cautious of not betraying the spot, taking care never to go in or out while there is any one in sight. During the time of incubation these little birds are extremely assiduous, and the nest is always occupied by the one or the other: the male always sitting when the female is obliged to yield to the calls of nature.

The first food of all birds of the sparrow kind

kind is worms and insects. Even the sparrow and the goldfinch, that when adult, feed only upon grain, have both been fed upon insects while in the nest. The young ones, for some time after their exclusion from the shell, require no food; but the parent soon finds by their chirping and gaping that they begin to feel the approaches of hunger, upon which she quits them to seek a supply. In her absence they continue to lie close together, and cherish each other by their mutual warmth, and during this interval they preserve a perfect silence, uttering not the slightest note till the parent returns. Her arrival is always announced by a chirrup, which they perfectly understand, and which they answer all together, each petitioning for its portion. The parent distributes a supply to each by turns, and the wren will, in this manner, feed seventeen or eighteen young ones, without passing over one of them.

When they are full fledged, and fitted for short flights, the old ones, taking the opportunity of fair weather, lead them a few yards from the nest, and then compel them to return. For two or three succeeding days they are led out in this manner, but each day to greater distances; and no sooner do the old birds find
they

they are sufficiently strong for flight, and enabled to provide for themselves, than the parents forsake them for ever, and pay no more attention to them than they do to other birds in the same flock; nay, if the young ones persist in following, they will sometimes use rough means to drive them away.

Under this denomination of birds there is a great variety who strongly resemble each other, not only in their form and plumage, but also in their appetites and manner of living. The gold-finch, the linnet, and the yellow-hammer, lead a very similar life, being active, lively, salacious; subsisting in the neighbourhood, and upon the labours of man. Their nests are alike, and they are all about the same time in hatching their young, which is usually fifteen days; but notwithstanding all these similarities they are most unquestionably different species. To account for these varieties has given rise to many speculative suppositions among naturalists, some equally vague and uncertain; the most general conclusion has been, that they originate from the inconstancy of the individuals to their own species. It has been observed that a linnet and a lark, a goldfinch and a canary bird, will breed together in a cage, and therefore it

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has been conjectured, that in the pairing season a union of this kind not unoften takes place; that from such a union an offspring is produced that in fact resembles neither father nor mother; and as this offspring is equally capable of generation, they have concluded there is no difficulty in accounting for those numerous varieties we daily see among those small birds, and who frequently differ only by some slight shades in particular feathers, but which difference has been thought sufficient by some nomenclators to authorize the invention of peculiar names.*

Willoughby, however, has divided all the smaller birds into those that have slender bills, and those that have short and thick bills. Those with slender bills chiefly live upon insects; those with short, strong bills, live mostly upon fruits and grain. Among the former, he enumerates the thrush, the blackbird, the field-fare, the starling, the lark, the titmouse, the water-wagtail, the nightingale, the redstart, the robin red-breast, the beccafigo, the stone-chatterer, the winchat, the white-throat, the

* Some nomenclators reckon sixty-seven different species of the sparrow tribe, and nine varieties, which make in all seventy-six. See Brisson *Ornith.* tom. iii. from p. 72, to p. 218.

the hedge-sparrow, the pettichaps, the golden-crowned wren, the wren, humming-bird, and several other small birds of the sparrow kind. All these live chiefly upon insects, and are consequently of particular benefit to man, as they assist in clearing his grounds of the swarms of pernicious vermin that devour the budding leaves and flowers, and that even attack the root itself before the vegetable can come to maturity. They also seek for and destroy the eggs of those insects which would otherwise propagate in numbers beyond the art of man to extirpate; and thus at once satisfy their own appetites and render him the most essential services. Besides which, this tribe includes the sweetest songsters of the grove; namely, the nightingale, the thrush, the backbird, the lark, the red-breast, the black-cap, and the wren.

Among the thick and short bills he reckons the gorssbeak, the green-finch, the bullfinch, the cross-bill, the house-sparrow, the chaffinch, the brambling, the goldfinch, the linnet, the siskin, the bunting, the yellow-hammer, the ortolan, the wheat-ear, and several other foreign birds, of which we know rather the names than the history. These chiefly feed upon fruits, grain, and corn. They are some-

times troublesome to man, as they are a numerous tribe, and the harvest often suffers from their depredations.* They are so exceedingly bold, that when they are driven off from one end of the field, they will fly round and come in at the other. “But these all,” says Goldsmith, “have their uses; they are frequently the dis-
“tributors of seeds into different districts;
“those grains which they swallow are some-
“times not wholly digested; and these, laid
“upon a soil congenial to them, embellish the
“face of Nature with that agreeable variety
“which art but vainly attempts to imitate:
“The misletoe-plant, which we often see
“growing on the tops of elm and other trees,
“has been thought to be propagated in this
“manner; yet as it is often seen growing on
“the under side of the branch, and sometimes
“on a perpendicular shoot, it seems extraor-
“dinary how a seed could be deposited in that
“situation. However this be, there are many
“plans propagated from the depositions of
“birds; and some seeds are thought to thrive
“the better, for first having undergone a kind
“of

* Their numbers and inconvenience are frequently so great, that in many of the villages in Germany the peasants are obliged to produce a certain number of sparrow's heads.
Frisch. vol. i. art. 7.

“ of maceration in the stomach of the little animal before it is voided on the ground.”

The songsters possessed of the strongest and the loudest pipe, are the canary-bird, the linnet, the chaffinch, the goldfinch, the greenfinch, the bullfinch, the brambling, the siskin, and the yellow-hammer. The note of these is not so generally pleasing as that of the soft billed birds, but it usually holds longer; and, in a cage, these birds are more easily fed, and are more hardy.

Some of these little songsters are also called *birds of passage*. The fieldfare, and the red-wing breed, pass their summers in Norway, and other cold countries, and are tempted hither by our mild winters, and by those various berries which then abound with us, and make their principal food. The hawfinch and the crossbill are uncertain visitants, and have no stated times of migration. Swallows of every species disappear at the approach of winter. The nightingale, the black-cap, the fly-catcher, the willow-wren, the wheat-ear, the win-chat, and the stone-chatter, leave us long before the approach of winter; while the siskin and the linnet only forsake us when our winters are more than usually severe. None of the others absolutely quit the kingdom; although

although some of them go at certain periods from one part of it to another.

Many of those kinds, however, which are birds of passage in England, are seen constantly in other parts, and make one country their fixed residence the whole year; while others, who are constant residents with us, emigrate in other countries; for instance, the swallow, that is particularly remarked for being with us, a bird of passage, in Upper Egypt, and in the island of Java, breeds and continues the whole year, without ever disappearing. Larks, that remain with us the year throughout, are birds of passage in Sweden, and forsake that climate in winter, to return again with the returning spring. The chaffinch, that with us is stationary, appears during the winter in Carolina and Virginia; but disappears totally in summer, to breed in the more northern regions. In Sweden also, these little birds are seen returning at the approach of spring, from the warmer climates, to propagate; which being accomplished by the latter end of autumn, the males and females separate; the males to continue among their native snows, the females to seek a warmer and gentler winter. On this occasion they are seen in flocks, that almost dark-
en

en the air, without a single male among them, making their way into the more southern regions of Denmark, Germany, and Holland. In this retreat, thousands fall by the way; some by fatigue; some by want; but the greatest number by the nets of the fowler; the taking them being one of the chief amusements among the gentry where they pass. In short, the change of country with all this little tribe, is rather a pilgrimage than a journey; a migration of necessity, rather than of choice.

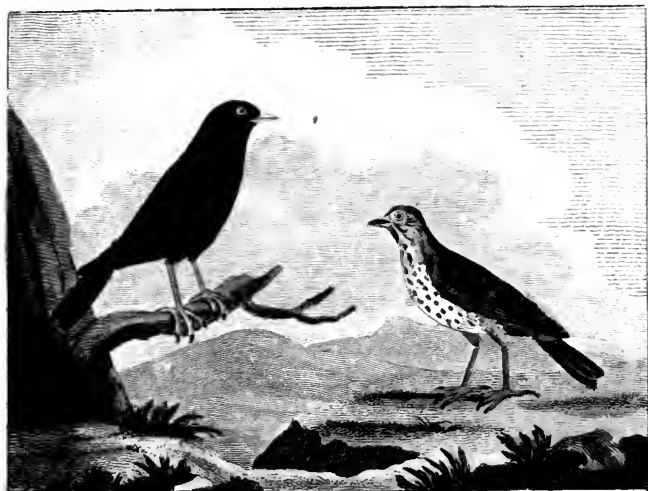
The blackbird, thrush, starling, redwing, fieldfare, ring-ouzel, and the water ouzel, are the largest of the sparrow kind, and may be distinguished from all others of this class, as well by their size as by their bills, which are a little bending at the point; a small notch near the end of the upper chap, and the outmost toe adhering as far as the first joint of the middle toe. Having spoken of these songsters generally, we shall now briefly enter into the particulars relative to the principal individuals among them.

THE BLACKBIRD

IS a bird well known in most, if not in all the counties of England. He is the largest song-bird found in the kingdom; and likewise one of the first that proclaims the welcome spring, by his shrill harmonious voice, as if he were the harbinger of Nature, to awaken the rest of the feathered tribe to prepare for the approaching season; and by the sweet modulation of his tuneful accents, endeavours to delight the hen and allure her to the office of incubation, even before there are leaves on the trees, and whilst the frosts are in the fields: building their nest the soonest of any bird; having young ones commonly by the 25th of March, and sometimes by the middle of that month.*

The cock, when kept in a cage, whistles and sings all the spring and summer time, or at least four or five months in the year; is a
stout

* The blackbird, says Buffon, lays its first eggs towards the end of winter, but these very seldom come to any thing, on account of the intemperance of the season: but the second laying generally succeeds entirely.



37

FIG.

38

Black Bird

Thrush.



39

FIG.

40

Sky Lark.

Nightingale.

stout hardy bird ; and besides his pleasant natural note, may be taught to whistle almost any tune.

When wild in the fields, they feed promiscuously upon berries and insects: it is a solitary bird, and, for the most part, flies singly.

The sexes are not easily known by their colour while young, but the blackest bird generally proves a cock: the bill of an old cock bird is of a deep yellow; in the hen the tip and upper part is black; the mouth, in both, is yellow within: the hen and young cock birds are rather brown, or of a dark russet, than black, and their bellies are of an ash-colour; but after the cock has changed his chicken feathers, he becomes coal-black.*

This bird breeds very soon in the year, and, as we have already observed, has young ones by the end of March, or sooner: they build their nests very artificially: the outside is of moss, slender twigs, bents, and fibres of roots, all very strongly cemented and joined together with

* The ancients pretended, that during winter the plumage of the blackbird changed to a reddish colour; and Olina, one of the most accurate of modern writers upon Ornithology, says that it happens in autumn.

with clay; the inside is plaistered and lined with a covering of small straws, bents, hair, or other soft matter; upon which the hen lays four or five eggs, seldom more, of a bluish green colour, full of dusky spots. They build pretty open; generally in a hedge, near the ground, and before there are many leaves upon the bushes; which so exposes their nest, considering the largeness of it, that it may be easily discovered.

These birds in general measure from the tip of the bill to the end of the tail, eleven inches, of which the bill is one inch, and the tail four.

The blackbird has of course about four or five young ones at a breeding; and if taken from the nest, they may be raised with little trouble, taking care to keep them clean, and feeding them with sheep's heart, or other lean meat, that is not salted, cut very small, and mixed with a little bread. When grown up, they may be fed with any sort of flesh meat, raw or dressed, provided it be not salt; it will be rather better food for them, if mixed with a little bread.

The blackbird is stout and healthful, not very subject to disorders; but if sick, or drooping, at any time, a house-spider or two will help him; and a little cochineal in his water
will

will do him much good. They love to wash and prune their feathers; therefore when fully grown, they should have water set in their cages for that purpose.

Blackbirds are always brought up from the nest, the old ones not being to be tamed, and when taken care of, seldom fail to repay the trouble with a delightful song.

The Blue-bird, however, described by Be-
lon, is in every respect far superior. “ This
“ beautiful animal entirely resembles a black-
“ bird in all but its blue colour. It lives in
“ the highest part of the Alps, and even there
“ chuses the most craggy rocks and the most
“ frightful precipices for its residence. As it
“ is rarely caught, it is in high estimation
“ even in the countries where it breeds, but
“ still more valuable when carried from home.
“ It not only whistles in the most delightful
“ manner, but speaks with an articulate dis-
“ tinct voice. It is so docile, and observes all
“ things with such diligence, that though
“ waked at midnight by any of the family, it
“ will speak and whistle at the word of com-
“ mand. Its colour about the beginning of
“ winter, changes from blue to black, and re-
“ verts to its original hue on the first ap-
“ proaches of spring. It makes its nest in
E 2 “ deep

“ deep holes, in very high and inaccessible
“ solitudes, and removes it not only from the
“ accesses of man, but also hides it with sur-
“ prising cunning from the chamois and other
“ wild beasts that might annoy its young.

“ The manner of taking this beautiful bird
“ is said to be this. The fowlers having
“ found out the place where it builds, take
“ with them a strong stilt or stake, such as
“ the climbers of rocks make use of to assist
“ them in their ascent. With the assistance
“ of this, they mount where an indifferent
“ spectator would think it impossible to as-
“ cend, covering their heads at the same time
“ to ward off any danger of the falling of peb-
“ bles or stones from above. At length, with
“ extreme toil and danger, having arrived at
“ the nest, they draw it up from the hole in
“ which it is usually buried, and cherish the
“ young with an assiduity, equal to the pains
“ they took to obtain them. It produces for
“ the most part five young, and never more;
“ it seldom descends into the plain country;
“ flies swifter than a blackbird, and uses the
“ same food.”*

THE

* The blackbird is very good eating; it is even preferred
to that of the thrush and the lark, in those countries where
it

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THE THRUSH.

THE common Song-Thrush is somewhat less than the blackbird: the upper part of the body is of an olive colour, with a mixture of yellow in the wings; the breast yellowish, spotted with dusky spots, and the belly white.

There are three or four other sorts of thrushes found in England; viz. the great thrush, called the missel-bird, measles-taw or shrike, which in the colour of the breast and belly agrees with the song-thrush, but is a bigger bird; he is very beautiful to look at, but not valued for singing, therefore seldom kept in a cage.

The

it feeds upon olives, which renders it succulent. Birds of prey like it and seek it as ardently as man, and wage a perpetual and destructive war with this species: were it not for this they would multiply to excess. Olin says they do not live more than seven or eight years.

The second sort, called the red-wing, swine-pipe, or wind-thrush, is in shape and colour so like the song-thrush, that it is difficult to distinguish them, only the latter has more and greater spots on the breast and belly, and is somewhat bigger: this kind is in no esteem for singing. It is a bird of passage, that shifts places according to the season of the year; but whither it goes, is not perfectly known.

The third sort is called the small heath-thrush, from its building upon heaths and commons; he is of a darker colour than any other of the thrush kind, and by some valued for singing; but as none of these sorts are comparable to the common song-thrush, nor so well known, I shall treat of the song-thrush only; which is a curious bird, as well for the great variety of his notes, as his long continuance in song, which is, at least, nine months in the year. In the beginning of the spring, he sits on high trees, and sings most sweetly, and is as delightful a bird as can be kept in a cage; some of them, when they have been brought up from the nest, have learnt the song of the wood-lark, nightingale, and other curious birds.

The cock and hen of this kind are so much alike in the colour of their feathers, and shape
of

of their bodies, that, notwithstanding the most careful examination, not any certain marks have been discovered to know the one from the other, excepting that when in full feather, the dusky, or olive colour on the cock's back, is somewhat darker than the back of the hen; he has also a more glossy cast; the spots on his breast and belly seem darker, and rather more of white appears on his belly.*

It is observeable, that in the cocks and hens of all kinds of birds, where the colours are the same in both, the cock-bird constantly excels the hen in the resplendency of his feathers; in the Song-Thrush, in an old bird, this difference is very apparent.

In young thrushes it is best to chuse the sleekest and brightest bird; when they begin to feed themselves, both cocks and hens will record; the cock will get upon his perch and sing his notes low for some time; the hen will attempt to sing, but do it only by jerks, and so disappoint expectation. At the latter end of the summer, when their moulting is over, the cock will break out strong in song, and sing in winter as well as summer.

This bird breeds very early in the spring,
nearly

* In general among thrushes the males and females are nearly of the same size.

nearly as soon as the blackbird; they commonly have young ones by the end of March or beginning of April. Mr. Albin says, that he saw a nest of young thrushes on the 5th or 6th of April, (notwithstanding it had been a cold spring) which were well feathered, and at least twelve days old.

The thrush builds in woods or orchards, and sometimes in a thick hedge, near the ground. The outside of the nest consists of fine soft green moss, interwoven with dead grass, hay, &c. The inside is not daubed as some have said, but it is very curiously plaistered with cow-dung, and with better skill than many of our plaisterers could do the same work. The blackbird always plaisters with clay or mud, the thrush always with cow-dung; the first lays a covering of soft stuff in the inside to lay her eggs upon; the thrush lays hers upon the bare inside or plaistering, but not till it is thoroughly dry; they are five or six in number, of a bluish green colour, speckled with a few small black spots, chiefly at the biggest end.

The length of a full grown bird, from the point of the bill to the end of the tail, is nine inches; of which the bill is one, and the tail three and a half; therefore, allowing for tail, bill, and head, which always lie out when she,

she sits in her nest, the cavity is just fitted to receive her body. I have observed the same of the nests of some other birds; especially such as build with sides, and make deep cavities. The bird stands within side when she is at work, and makes her own body the model of her dimensions in building.

The song-thrush has five or six young ones at a breeding, which may be taken at twelve or fourteen days old, or sooner if it be mild weather; they must be kept warm and clean, and fed with raw meat, bread, and hemp-seed bruised; the meat cut small, and the bread a little wet, and then mixed together. When grown up, they may be fed with flesh-meat, boiled, raw, or roasted, provided it be not salt; or even with bread and hemp-seed only; when in the fields they feed on insects and snails, as also the berries of white-thorn and misletoe.

The thrush, called the Missel-bird, from its feeding on the berries of the misletoe, deserves further notice from its peculiarities.

This bird, in the colour and spots of the breast and belly, agrees with the song-thrush; but is a larger bird, and very rare to be seen.

They build their nest in a thicket, near where plenty of misletoe is, or in some pit, it being a very solitary sort of bird; they make as large a nest as a jay, and lay as big an egg;

they commonly build the outside of their nest with rotten twigs, and the inside of dead grass, or moss that they pull from trees. This bird delights mightily in old orchards. The hen breeds twice a year, and has three young ones at a breeding, never above four; she feeds all her young with the berries of misletoe, and nothing else, that ever could be perceived.*

THE

* It has been asserted that the thrush swallows the entire grains of the juniper, ivy, and misletoe, and passes them so sound, that they vegetate if dropt in congenial ground; but Aldrovandus assures us, that he made these birds swallow the grapes of the wild vine, and the berries of the ivy, without ever finding in their excrements any of the grains that had preserved their forms.

THE FIELD-FARE, AND THE RED-WING.

THE Field-fare and the Red-wing make but a short stay in this country. With us they are insipid tuneless birds, flying in flocks, and excessively watchful to preserve the general safety. All their season of music and pleasure is employed in the more northern climates, where they sing most delightfully, perched among the forests of maples, with which those countries abound. They build their nests in hedges, and lay six bluish green eggs spotted with black.*

F 2**THE**

* Linnæus says that a field-fare which had been brought up by a wine-merchant became so familiar, that he would run about upon the table, and drink wine out of a glass; that it drank so much wine it became bald; but having been confined a year in his cage without touching any wine, it recovered its plumage. This anecdote is valuable on two accounts; it shews the effect of wine upon the feathers of birds; and it shews also the instance of a tame field-fare, which is rare.

THE STARLING.

THE Starling is nearly as big as the black-bird, and is in shape very much like that bird, but is distinguishable from the rest of this tribe by the glossy green of its feathers in some lights, and its purple appearance in others. It does not sing naturally, but has a wild, screaming, uncouth note ; yet, for his aptness in imitating man's voice, and speaking articulately, and his learning to whistle divers tunes, it is highly valued as a very pleasant bird. In winter these birds assemble in vast flocks, and feed upon worms and insects. At the approach of spring, they assemble in fields, as if in consultation together, and for three or four days seem to take no nourishment; the greater part leave this country ; the rest breed here, and bring up their young.

There is a mark peculiar to the cock of this kind, whereby he may be known from the hen, whilst young. Under his tongue he has a black stroke, very plain to be seen on opening his mouth, which the hen has not, or at least, so faint, that it is hardly visible ; but the first time the cock moults his feathers, he loses that black stroke : he may then be known from

From the hen by his colours, in the beauty of which he much excels her. His breast has a changeable cast of green, red, and purple; the feathers all over his body are black, with a blue and purple gloss, varying, as it is differently exposed to the light; only the tips of the feathers on his head, neck, and breast, are yellowish; and on the belly, white: all his spots and colours are brighter than those of the hen. The bill of the cock is of a pale yellow, inclining to white; of the hen, dusky.

This bird usually breeds in May, has young ones fit to take towards the end of that month, sometimes, by the middle of it. They build their nests in the holes of towers, ruins, pigeon-houses, trees, and sometimes in the cliffs of high rocks over the sea. The goodness of these birds does not depend on the places where they breed, though some have given the preference to one sort, and some to the other; for the same birds may build in any of those places, according as they find it most convenient for them. She lays four or five eggs, lightly tintured with a greenish blue.

The best mode of teaching them to speak, is constantly to make use of the same words every time any victuals is given them; to which, after a few repetitions, they will become attentive, and being apt birds, learn to articulate

articulate very distinctly in a very short time. To slit their tongues, as many people advise and practise, that the birds, as they say, may talk the plainer, is a cruel and useless expedient, as they will talk perfectly as well without. The starling, when wild, feeds upon beetles, worms, and other insects.

The length of a full-grown bird, from the tip of his bill to the end of his tail, is nine inches, of which the bill is an inch and a quarter, and the tail three inches ; and, when in flesh, weighs about three ounces. The bird is naturally hardy and healthy ; but when kept in a cage is subject to the cramp, fits, &c. sometimes it seizes him so suddenly, that he will fall down from his perch, and beat himself to death presently ; but a spider or meal-worm, is a good remedy against it, and should be given him two or three at a time, twice or thrice a week.

THE NIGHTINGALE.*

NOTWITHSTANDING the preference given by different individuals to the notes of different

* There is no man, says Buffon, well organised, to whom this name does not recall those beautiful nights of spring, when

different song-birds, yet it is generally allowed that the Nightingale stands most pre-eminent among this harmonious tribe. He sends forth his pleasant notes with so lavish a freedom, that he makes even the woods echo with his melodious voice; and this delightful bird, scorning to be outdone, will not yield to any competitor, either of birds or men; the woodlark is his greatest antagonist, between whom there sometimes happens such a contention for mastery, that they appear rather resolved to die in their exertions than yield. This fame for a superiority of voice is not, however, newly acquired, since almost every ancient naturalist has contributed to establish its reputation. Pliny says, “ The nightingale, “ that, for fifteen days and nights hid in the “ thickest shades, continues her note without “ intermission, deserves our attention and wonder. How surprising that so great a voice “ can reside in so small a body! such perseverance in so minute an animal! With what “ a musical propriety are the sounds it produces modulated! The note at one time “ drawn out with a long breath, now stealing “ off

when the sky is serene, the air calm, all nature in silence, and as it were, attentive to her beautiful notes.

“ off into a different cadence, now interrupted
 “ by a break, then changing into a new note
 “ by an unexpected transition; now seeming
 “ to renew the same strain, then deceiving ex-
 “ pectation! She sometimes seems to murmur
 “ within herself: full, deep, sharp, swift,
 “ drawling, trembling; now at the top, the
 “ middle, and the bottom of the scale! In
 “ short, in that little bill seems to reside all
 “ the melody which man has vainly laboured to
 “ bring from a variety of musical instruments.
 “ Some even seem to be possessed of a diffe-
 “ rent song from the rest, and contend with
 “ each other with great vigour. The bird
 “ overcome is then seen only to discontinue its
 “ song with its life.”*

From Pliny's description, we should be led
 to believe this bird possessed of a persevering
 strain; but though it may be true of the
 nightingale of Italy, yet in our hedges in Eng-
 land

* Barrington informs us that our bird-catchers, and pri-
 vate gentlemen residing in the country, who have frequent
 opportunities of hearing the nightingale, have designated
 its principal tones by particular words: viz. *sweet*; *jug sweet*;
sweet jug; *pipe rattle*; *bell pipe*; *swat, swat, swaty*; *water*
bubble; *scroty*; *skeg, skeg, skeg*; *whitlow, whitlow, whitlow*.
 But it must be remarked that in the application of these dif-
 ferent names to the different tones of birds, more attention
 has been paid to the sound of each word, than to the sig-
 nification.

land the little songster is by no means so liberal of his music. His note is soft, various, and interrupted, and he seldom continues it, without a pause, above the time that one can count twenty. The nightingale's pausing song would be the proper epithet for this bird's music with us, which is more pleasing than the warbling of any other bird, because it is heard at a time when all the rest are silent.

Its song, however, in captivity is not so very alluring; and the tyranny of taking it from those hedges where only it is most pleasing, still more depreciates its imprisoned efforts. Gesner assures us, that it is not only the most agreeable songster in a cage, but that it is possessed of a most admirable faculty of talking. He tells the following story in proof of his assertion, which he says was communicated to him by a friend. "Whilst
" I was at Ratisbon," says his correspondent,
" I put up at an inn, the sign of the Golden
" Crown, where my host had three nightin-
" gales. What I am going to repeat is won-
" derful, almost incredible, and yet is true.
" The nightingales were placed separately, so
" that each was shut up by itself in a dark
" cage. It happened at that time, being the
VOL. II. G " spring

“ spring of the year, when those birds are
“ wont to sing indefatigably, that I was so
“ afflicted with the stone that I could sleep
“ but very little all night. It was usual then
“ about midnight, when there was no noise
“ in the house, but all still, to hear the two
“ nightingales jangling, and talking with each
“ other, and plainly imitating mens’ dis-
“ courses. For my part, I was almost asto-
“ nished with wonder, for at this time, when
“ all was quiet else, they held conference toge-
“ ther, and repeated whatever they had heard
“ among the guests by day. Those two of
“ them that were most notable, and masters
“ of this art, were scarce ten foot distant from
“ one another. The third hung more remote,
“ so that I could not so well hear it as I lay
“ a-bed. But it is wonderful to tell how
“ those two provoked each other; and by
“ answering, invited and drew one another to
“ speak. Yet did they not confound their
“ words, or talk both together, but rather
“ utter them alternately and of course. Be-
“ sides the daily discourse of the guests they
“ chaunted out two stories, which generally
“ held them from midnight till morning; and
“ that with such modulations and inflections,
“ that no man could have taken to come from
“ such

“ such little creatures. When I asked the
“ host if they had been taught, or whether he
“ observed their talking in the night, he an-
“ swered, no: the same said the whole family.
“ But I, who could not sleep for nights toge-
“ ther, was perfectly sensible of their dis-
“ course. One of their stories was concern-
“ ing the tapster and his wife, who refused to
“ follow him to the wars, as he desired her:
“ for the husband endeavoured to persuade
“ his wife, as far as I understood by the birds,
“ that he would leave his service in that inn
“ and go to the wars in hopes of plunder.
“ But she refused to follow him, resolving to
“ stay either at Ratisbon, or go to Nuremberg.
“ There was a long and earnest contention
“ between them; and all this dialogue the
“ birds repeated. They even repeated the
“ unseemly words which were cast out be-
“ tween them, and which ought rather to
“ have been suppressed and kept a secret.
“ But the birds, not knowing the difference
“ between modest, immodest, honest and
“ filthy words, did out with them. The other
“ story was concerning the war which the
“ Emperor was then threatening against the
“ protestants; which the birds probably heard
“ from some of the generals that had con-
“ ferences

“ferences in the house. These things did
“they repeat in the night after twelve o’clock,
“when there was a deep silence. But in the
“day-time, for the most part, they were si-
“lent, and seemed to do nothing but meditate
“and revolve with themselves upon what the
“guests conferred together as they sat at
“table, or in their walk. I verily had never
“believed our Pliny writing so many won-
“derful things concerning these little crea-
“tures, had I not myself seen with my eyes,
“and heard them with my ears uttering such
“things as I have related. Neither yet can
“I of a sudden write all, or call to remem-
“brance every particular that I have heard.”

The nightingale is about the size of a gold-
finch, but of a longer shape in the body; its
length, from the tip of the bill to the end of
the tail, measures nearly seven inches; the
bill resembles that of the thrush, or blackbird;
they have little variety in the colour of their
feathers, nor have they any particular preten-
sions to beauty; their backs and upper parts
are of a faint tawney colour, with a greenish
cast, the tail-feathers being almost a reddish
brown; their bellies are white, but the fea-
thers under the throat and wings have a
darker shade, mixed with green; they have
blackish

blackish bills, their feet are of a flesh colour, and the insides of their mouths yellow. They do not reside in this climate the whole year; they come towards the latter end of March or beginning of April, and commence their emigration in September or October, but whither they take their flight has not yet been discovered.

They frequent cool and shady places, where there are little rivulets of water, and they build their nests in close thick hedges, pretty low, a little above the edge of the bank, and most commonly where briars and thorns are thickly interwoven, which are a strong fence to them against the approach of their enemies; the nest is made of the leaves of trees, straw, and moss, and in which the hen lays four or five eggs of a brown nutmeg colour, but she seldom brings them all to perfection; their time of hatching is usually about the middle of May.

A nightingale's nest may be found by observing the place where the cock sings, for the hen is never far off; or you may stick two or three meal-worms on the thorns near the place most frequented by the cock, and then observe, when he comes to take them, which way he carries them, and by listening
you

you will hear the noise of the young, while the old ones are feeding them, for their cry is very loud for so small a bird.

When you have found the nest, if the young ones are not fledged enough to be taken, you must not touch them, for then the old ones will entice them away: they should not be taken till they are almost as full of feathers as the old ones; and as they are apt to be sullen and refuse their meat, when taken so old, you may open their bills, and give them two or three small pieces at a time, and they will soon grow tame and feed themselves; they should be immediately put, with the nest, into a little basket, covered up warm, and constantly fed every two hours. Their food should be sheep's hearts, or other raw flesh-meat, chopped very fine, and all the strings, skins, and fat taken away: and it should always be mixed with hens' eggs boiled hard; they should be put in cages like the nightingale's back-cage, with a little straw or dry moss at the bottom; but when they are grown large, they should have ants' mould; they must be kept very clean, like other singing birds, for otherwise they will have the cramp, and perhaps the claws will drop off. In autumn they will sometimes
abstain

abstain from their food for a fortnight, unless two or three meal-worms be given to them two or three times a-week, or two or three spiders in a day; they must likewise have a little saffron in their water. Figs chopped small among their meat will help them to recover their flesh. When their legs are gouty, to which they are very subject after having been kept some time in a cage, they should be anointed with fresh butter, or capon's fat, three or four days together. If they grow melancholy, put white sugar-candy into their water, and feed them with sheep's heart, giving them three or four meal-worms in a day, and a few ants, with their eggs, and some of their mould at the bottom of their cage; among which, some hen's egg boiled hard, and chopped very small, should be strewed.

The nightingales caught with nets very frequently prove good songsters; those taken before the 23d of April* are accounted the best, because after that they pair with the hens. They usually haunt woods, coppices, and quickset hedges, where they may be taken
with

* Those which are taken after the 15th of May, rarely sing the rest of the season; those which do not sing at the end of fifteen days, rarely sing well, and are often females.

with trap-cages, baited with meal-worms; they should be placed as near the spot where the bird sings as you can, and before you fix the trap, turn up the earth twice the breadth of the cage, because they will there look for food. They are also taken with lime twigs when placed upon the hedge where they usually sing; and there should be meal-worms stuck at places to draw them into the snare. After they are taken, their wings should be gently tied with thread, to prevent their beating themselves against the cage; but they should be untied, as soon as he in any manner becomes familiar. He should be first hung in a private place, that he may not be disturbed; and should be fed every two hours at farthest, with sheep's heart and egg minced very fine, mingling amongst it some worms, ants, caterpillars, or flies, such being his usual food when at liberty. It very often happens that they will be sullen at first; in which case, he must be taken in the hand, his bill forced open with a piece of stick made thin at one end, giving him as many pieces as he will willingly take: then he should have some meat set at the bottom of the cage, and to entice him to eat, there should be plenty of ants or meal-worms mixed with it; as he begins to eat freely, these may be diminished

nished by degrees, until at last he has nothing but sheep's heart and egg, which is very good for him.

THE LARK.

ALL which come under this denomination, whether the sky-lark, the wood, or the tit-lark, are distinguishable from other small birds by the length of their heels, and are louder in their song, though not so pleasing as either of those we have already spoken of; it is true, indeed, that the music of every bird in captivity produces no very pleasing sensations; it is but the mirth of a little animal insensible of its unfortunate situation; it is the landscape, the grove, the golden break of day, the contest upon the hawthorn, the fluttering from branch to branch, the soaring in the air, and the answering of its young, that gives the bird's song its true relish. These

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united, improve each other, and raise the mind to a state of the highest, yet most harmless exultation. Nothing can, in this situation of mind, be more pleasing than to see the lark warbling upon the wing, raising its note as it soars until it seems lost in the immense heights above us; the note continuing, the bird itself unseen; to see it then descending with a swell as it comes from the clouds, yet sinking by degrees as it approaches its rest, the spot where all its affections are centered; the spot that has prompted all this joy. This harmony continues several months, beginning early in the spring, on pairing. In winter they assemble in flocks, when their song forsakes them, and the birdcatchers destroy them in great numbers for the tables of the luxurious.

It is not very easy to distinguish the cock from the hen in this kind; some say the bird that sets up his feathers on his crown is certainly a cock, and that the longest heeled bird is another sure sign, as is the having two white feathers in their tail; but these conclusions are all very uncertain. When they are grown up, and fully feathered, that general remark, in some measure, will hold good, that the highest-coloured bird is the cock; for
whoever

whoever observes them together, may perceive the cock-lark to be something browner upon the back, of a more yellowish cast on the throat and breast, and the feathers whiter upon the belly.

The sky-lark has young ones by the end of April, or beginning of May. The hen builds her nest, such as it is, for it consists only of a few bents, or similar materials, always upon the ground, or in a hole made by the foot of a horse, the wheel of a cart, &c. either in corn-fields of any sort, or in pasture of any kind, and lays four or five brown eggs, almost of the colour of a clod of earth, thickly speckled with brownish spots.

The sky-lark is a valuable bird with those who admire the feathered songsters in the cage, both from his freeness of singing, his pleasant harmonious notes for at least eight months in the year, and being a long-lived, healthful bird: many of them have been kept for the space of fifteen or sixteen years, and sung stoutly the whole time. The following particulars respecting the taking and managing it may not be unacceptable:

These birds must be taken when about ten days old; if let alone longer there is great hazard of losing them, as they have been

known to quit their nest in seven or eight days, when they have been disturbed ; if the old ones see any person look at their young they will then entice them away suddenly ; and in rainy weather, it is surprising to see how young they will leave their nest ; one would naturally think the nest to be the best and safest place for them in such weather ; but so it is, that the young of most, if not all kinds of birds, are nourished more, their feathers grow faster, and they sooner fly, or quit their nests, in wet, than in dry weather.

When you have taken a nest of young, put them into a basket with some short clean hay at the bottom, cover and tie them down close and warm, and feed them with white bread and milk boiled thick, mixed with about a third part of rape-seed, soaked, boiled, and bruised : some bring them up with sheep's heart minced very fine, or other flesh meat. Great care is necessary, in bringing up young birds, to keep them clean, and feed them regularly once in about two hours, from morning till night, with fresh and wholesome food, as that is the principal means of preserving them : in a week's time you may cage them in a large cage, putting some hay cut pretty short, or coarse bran at the bottom, turning
or

or shifting it every day. Order them after this manner till they can feed themselves with dry meat, viz. bread, egg, and hemp-seed, which they will do in about three weeks or a month. Remember to boil your egg very hard, grate it fine, and mix it with an equal quantity of hemp-seed bruised, while the birds are young, but when they are able to crack the seed, give it them whole, and a little bread grated among it. You may then let them have a fresh turf of grass once or twice a week, and sift some fine dry gravel at the bottom of the cage, shifting it often, that it may not clog their feet. for change of diet you may sometimes give them a little of the flesh meat. After they have done moulting, you may give them bread, egg, and whole hemp-seed, every other day, and a fresh turf once a week. As the birds are of an hardy nature, this careful management will preserve them many years.

This bird at full growth is six inches and a quarter long; of which the tail is three inches, and the bill three quarters of an inch. When in flesh it weighs about an ounce and a half.

The sky-lark, as mentioned before, is seldom diseased; but if you perceive him at any time to scour, or dung loose, grate a
small

small matter of old cheese among his victuals, or give him three or four wood-lice in a day, or a spider or two, and in his water a little saffron, or liquorice; these are the best things we can recommend, and what will relieve him, though he will not often stand in need of any thing more than good meat and drink, clean gravel, and a fresh turf.

There are several ways practised of catching sky-larks, according to their ages. To take Pushers; they are birds which have left their nest three or four days: to take them, you must watch in some convenient place, as much out of the old ones' sight as possible; either stand close in a hedge, or lie down in the field, &c. and you will presently see them bring meat to feed their young; which, as soon as you perceive, and observe them to hover just over the grass, &c. and drop down on a sudden, run in upon them as fast as you can, where you will generally find the young ones; if you miss them, search narrowly about, for they will creep into some hole and lie close, or in a large turf of grass, &c. sometimes they will run away among the grass or corn, exceedingly fast; when they do that, you can very seldom catch any: you must wait for the old ones bringing them meat again; but

but don't run in the first time; see if they come two or three times with meat, and settle at the same place; if at different places, and at little distances from each other, then you may be sure the young ones have straggled in the fright, and are at those different places; you may then run in where you judge they are by the constant coming of the old birds, who will find them out, and soon get them together again.

When you take any of these birds, put them in a large cage with hay or coarse bran at the bottom, and feed and order them as you do the nestling. If you find them sullen and will not eat, you must for a little while cram them with sheep's heart, &c. they will soon come to. These birds generally prove as good, or better, than those raised from the nest.

Those young birds are called branchers, that were bred, and flew that year, about two or three months old, before they have moulted their nestling feathers; what are taken at that age, before they begin to moult, are very good, little inferior to the nestlings; but after they have moulted, or in moult when taken, they seldom prove good birds.

The time for taking branchers is in June or July, with a hawk, and a net of about eleven

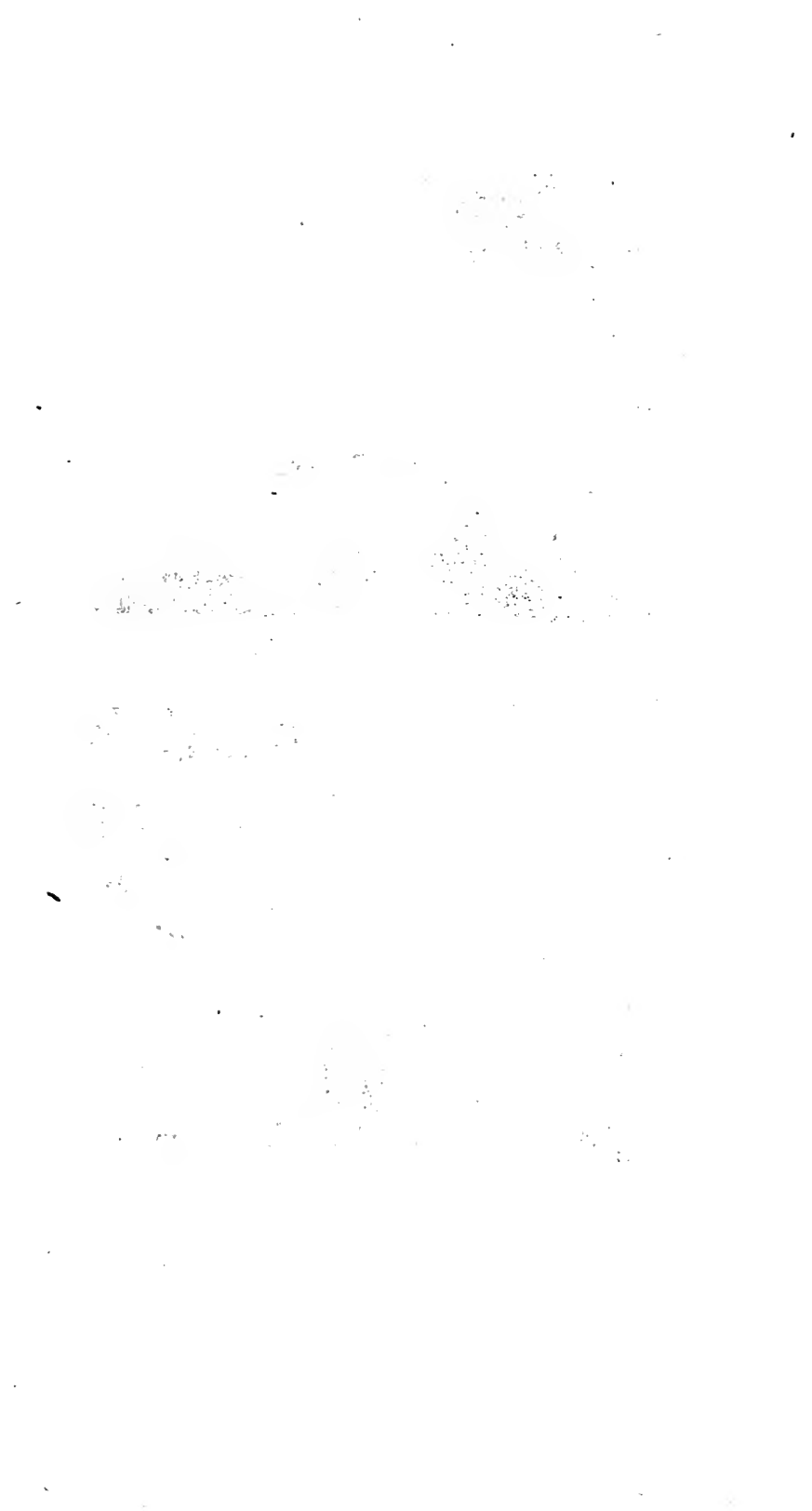
or

or twelve yards long, and three or four broad, with a line run through the middle of it. The haunt of the larks being discovered, the hawk is thrown up, and kept just hovering above the head; at the sight of which, they will lie so close that you may very easily draw your net over them. When you have taken them, give them bread, egg, and bruised hemp-seed; put in the bottom of the cage red sand, and strew them a little meat in the cage for two or three days, and they will presently become tame.

Sky-larks are also taken in flight with clap-nets in great numbers. In some places they take them with a glass, called a larking-glass; this they use when the sun shines brightly, and it makes great havock amongst these birds: but the most destructive way is in the dark nights with a net called a trammel; it takes all sorts of birds that it comes near, as partridges, quails, &c. Larks are ensnared likewise with a noose made with two horse-hairs twisted together, which catches them by the neck or legs. This way is practised when the ground is covered with a deep snow.*

THE

* It is said that those larks which are wanted for singing should be taken in October or November, preferring the males as much as possible; and their wings should be tied when they are too wild, or they will injure themselves against the sides and bottom of the cage.





Wood Lark.

Robin Redbreast



Hedge Sparrow.

Red Start.

THE WOOD-LARK.

THIS bird is universally admired for its great variety of soft and delightful notes, and in the opinion of some people, he is preferable to the nightingale for singing, and if hung in the same room, will strive with him for the mastery. If brought up from the nest, and caged near the nightingale, he will learn his notes, and, as it were, incorporate them with his own. He is very beautiful, both in shape and plume: his breast and belly are of a pale yellowish hair-colour, faintly spotted with black; the back and head are party-coloured, of black and reddish yellow.

The cock is flat-headed, and full behind the ears, with a white stroke from each nostril, forming a curve-line over the eye, and almost meeting behind the neck; the whiteness of this line, and its extension behind the neck,

are the best signs to distinguish the male: he is full chested, long from the neck to the shoulder of the wing, narrow on the vent and rump; the rump part a dark brown, with a long lightish tail, and the two corner feathers touched with white; long in body, and carries himself upright; some of the feathers under the throat have small stripes; they have three small white feathers on the top of the shoulder, and a long heel.

The hen is narrow-headed, and brown over the eyes, flattish from the breast to the belly, and round at the rump, short-heeled, and only two whitish, dull, or cream-coloured feathers on the shoulder, and the curve-line of the head reaches but a little beyond the eye.

The wood-lark is a very tender bird, and yet breeds as early in the spring, as the black-bird, or any other; the young birds are ready to fly by the middle of March. They build at the foot of a bush or a hedge, or in lays where the grass is wet or dry, under some turf to shelter them from the weather. Their nest is made of withered grass, fibrous roots, and similar matter, with a few horse-hairs within side at the bottom, being a small, and very indifferent fabric, and hardly any hollow or sides; the weight of the bird is a little
above

above an ounce; its length six inches, of which the bill is something above half an inch, and the tail two. She lays four eggs, of a pale bloom colour, beautifully mottled, and clouded with red, yellow, &c.

The young ones are tender birds, and exceedingly difficult to bring up from the nest; they must not be taken too soon, not before they are well feathered; because, when they are too young, they are more subject to the cramp and scouring, which commonly kills them: put them into a basket with a little hay at the bottom, where they may lie clean and warm, tying them close down: feed them with sheep's heart, or other lean flesh meat, raw, mixed with a hard boiled egg, a little bread, and hemp-seed bruised or ground, all chopped together as fine as it is possible to do it, and made a little moist with clean water; every two hours, or oftener, give them five or six small bits, taking great care never to overload their tender stomachs. The wild ones feed upon beetles, caterpillars, and other insects; and likewise upon almost any seeds they meet with.

The branchers are taken in June and July, with a net and a hawk, after the same manner as the sky-larks. They are to be found har-

bouring about gravel-pits, upon heath and common land, and in pasture fields. For fear of the hawk, they will lie so close, that sometimes they suffer themselves to be taken up with the hand. These birds soon grow tame.

The next season is for Michaelmas birds, which are taken with clap-nets in great numbers in September, and are counted better birds than what are caught at any other time of the year, because keeping them all the winter makes them more tame than birds caught in January or February, and will sing eight or nine months in the year. Wood-larks at this time commonly fly very high, and therefore the highest ground is usually chosen to lay the nets upon, likewise in a cart-way, or where a spot of earth is fresh turned up, or sometimes you may turn it up on purpose.

A third season for taking wood larks is in January; what are caught at that time are very stout, good birds, and will sing in a few days after they are taken, both better and louder than those taken in September, but will not sing so many months; these are caught with the clap-net the same as those at Michaelmas, and are found at that time of the year lying near a wood side in pasture ground, where the sun rises.

Wood-larks

Wood-larks are sometimes taken when they are matched with their hen; but the end of January ought to be the latest time for taking them, because they are early breeding birds, and if taken later, are worth very little; it is true, he will sing almost as soon as taken, by reason of his rankness in having accompanied the hen, but will soon fall off from his song, and be heard little more all that summer.

All the wood-larks, taken at different seasons, must be equally fed with hemp seed bruised very fine, and mixed with bread and egg hard boiled and grated, or chopped as small as possible. When first taken, he will be shy, but by sifting some fine red gravel in the bottom of his cage, and scattering some of his meat upon it, he may be enticed to eat sooner than out of his trough, and in general, by that means, will be brought to eat freely in the course of three or four days.

His diet should be ordered, in a great measure, after the sky-lark's, except giving him a turf of grass, of which he should not have any, but often fine red gravel in his cage; and when not well, instead of that, some mould full of ants, which is the most agreeable live food that can be given him. He may also have meal-worms, or hog-lice, not more than

two

two or three a-day: and let him have a little saffron or liquorice sometimes in his water. If he should scour, grate chalk or cheese among his meat, and amongst his gravel likewise. He will eat any kind of flesh meat minced fine, which it is well now and then to let him have for change of diet, always leaving some of his constant meat in the cage at the same time, that he may eat which he will*.

* The flesh of this bird is well tasted, and much sought after. Olina says that the species is common only in the country about Rome; but this has been contradicted by subsequent naturalists, who have proved that it is to be found in almost every country.

THE TIT-LARK.*

THIS is less by one half than the sky-lark, being only six inches in length, and ten inches and a quarter in breadth; and is more of a greenish colour; the head is small, and the body pretty long and slender; the iris of the eye is hazel, and the top of the head and upper part of the body are of a yellowish green, with a mixture of black and ash-colour: the sides of the wings are of a dusky brown, with the edges and tops of the feathers somewhat greenish, some of a pale yellow, and others white; the breast is of a pale dusky colour, spotted with black, but the belly is whiter, and free from spots; the tail is above two inches long, and some of the upper parts of the external feathers are white, and others brown, with pale green edges; the feet are yellow, and the claws are very long, and of a pale

* The tit-lark usually builds its nest in meadows and even in low and marshy meadows; they hide it very well; while the female sits, the male remains perched on a tree near her singing, and clapping his wings.—The tit-lark is found in France, Germany, England, and Sweden.

pale dusky colour; they feed upon insects and seeds, like other larks, but they build their nests with moss in low bushes, not far from the ground, covering them on the inside with horse-hair; they generally lay five or six eggs, of a dark brown colour, and the young are commonly hatched about the beginning of June.

In this kind the cock is all over more yellow than the hen, but especially under the throat, on the breast, legs, and soles of the feet. In nestlings, they cannot well be distinguished by their colours, therefore must wait till you hear them begin to record their song, which is the first surest sign of a cock-bird.

The hen tit-lark builds amongst grass, or in corn-fields; her nest is small, pretty much like the wood-lark's; she lays five or six eggs, of a dark brown colour, and has young ones fit to take towards the end of May.

They may be brought up with the same meat and management as young wood-larks or nightingales; but it is hardly worth the trouble, because so many are taken, when they first come to visit our part of the world, both with clap-nets, and lime twigs, as they catch linnets, gold-finches, &c. When you first take them, tie the ends of their wings with thread

thread, to prevent their fluttering and beating themselves against the cage, and they will soon grow tame. Feed them as you do the wood or sky-lark; at first give them hemp-seed and bread, made very fine, and mixed together; likewise ants' mould in their cage, meal-worms, &c. strew their victuals about their cage, to allure them to eat, and in three or four days they will take it freely enough: and will sing in about a week's time. Cage them single, in a cage somewhat closer than the common wood-lark's, which is very necessary to prevent their doing themselves an injury.

THE ROBIN-REDBREAST.*

THIS is a well known bird all over the kingdom; and is much admired for the freedom and shrillness of his song. The cock has a sweet melodious voice, so free and acute that very few birds can equal it. His own

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* Belon says, that it is an error to call this bird *red-breast*, for the breast is in fact of an orange colour.

natural song, because it is an exceeding good one, is preferable to any that can be taught him.

The eyes and upper part of the Robin's bill are encompassed with a fine deep red, or orange-colour, like that upon the breast; the upper parts of the body are of a dusky brown, shaded with a greenish olive-colour, with a pale bluish line upon the neck; the belly whitish, the legs and feet of a dusky black.

In the winter time, when there is a scarcity of meat in the fields, he will boldly enter into houses to seek his food, being a very bold bird, sociable and familiar with man, but not with any bird besides his own mate.

In the summer, when there is plenty of food in the fields, and he is not pinched with cold, he will withdraw himself into the most desert places, where he generally builds his nest, and lives upon worms, ants, their eggs, and other insects, &c. But, though these birds withdraw from houses into the woods in the summer time, yet there are a great many that breed and harbour about farm-yards and out-houses all the year through.

The cock may be known by his breast,
which

which is of a deeper red than the hen's, and extends farther upon the head, and some say by the colour of his legs, which are darker, and by certain hairs which grow on each side of his bill: the bright, red breast is a mark that may be depended upon, the others do not always hold. The cock is likewise of a darker olive upon the upper surface of his whole body.

The robin breeds in the spring, and is so prolific that some of them are said to have two or three nests in the months of April, May, and June. The hen builds her nest on the side of a ditch or bank, among thorns and briars, or hedges; likewise in the woods, which they haunt in summer. Those that stay about farm-yards build in out-houses, and broken walls of old buildings; her nest is made of coarse materials, the outside of dry green moss, intermixed with coarse wool, small dried sticks, straws, leaves, peelings from young trees, and other dried stuff, lined with a few horse hairs, on which she lays five or six eggs, but sometimes no more than four, of a cream colour, sprinkled all over with fine reddish yellow spots at the blunt end, so thick that they appear almost in one.

This bird is near six inches in length, from the tip of the bill to the end of the tail, the former being about half an inch, and the latter two inches and a half.

They may be taken at ten or twelve days old; if left too long, they are apt to be sullen, and consequently much more troublesome to bring up; they should at first be put in a little basket, with soft hay at the bottom, and kept very warm, especially in the night. In bringing them up they should be treated in the same manner, and supplied with the same food as we have mentioned for the woodlark and nightingale.

This bird is very subject to the cramp, and a giddiness of the head, which makes him often fall from his perch upon his back, and it is present death, unless he has some help speedily given him. The best method to prevent it is, to keep him warm and clean in his cage; and, as a cure, two or three meal-worms now and then for the former, and six or seven earwigs in a week for the latter.

If he have but little appetite, give him now and then six or seven hog-lice, which may be found in any piece of old rotten wood,
and

and never let him want water that is fresh two or three times a week.

There are many kinds of insects that birds will eat greedily, and very probably would relieve them under such maladies, could they be conveniently procured at all times, such as young smooth caterpillars, (a robin will not touch a hairy one) some sorts of spiders, ants, &c. but there is no insect that is more innocent, or agrees better with birds in general, than the meal-worm, which may be had with little trouble at the meal-shops almost at any time.

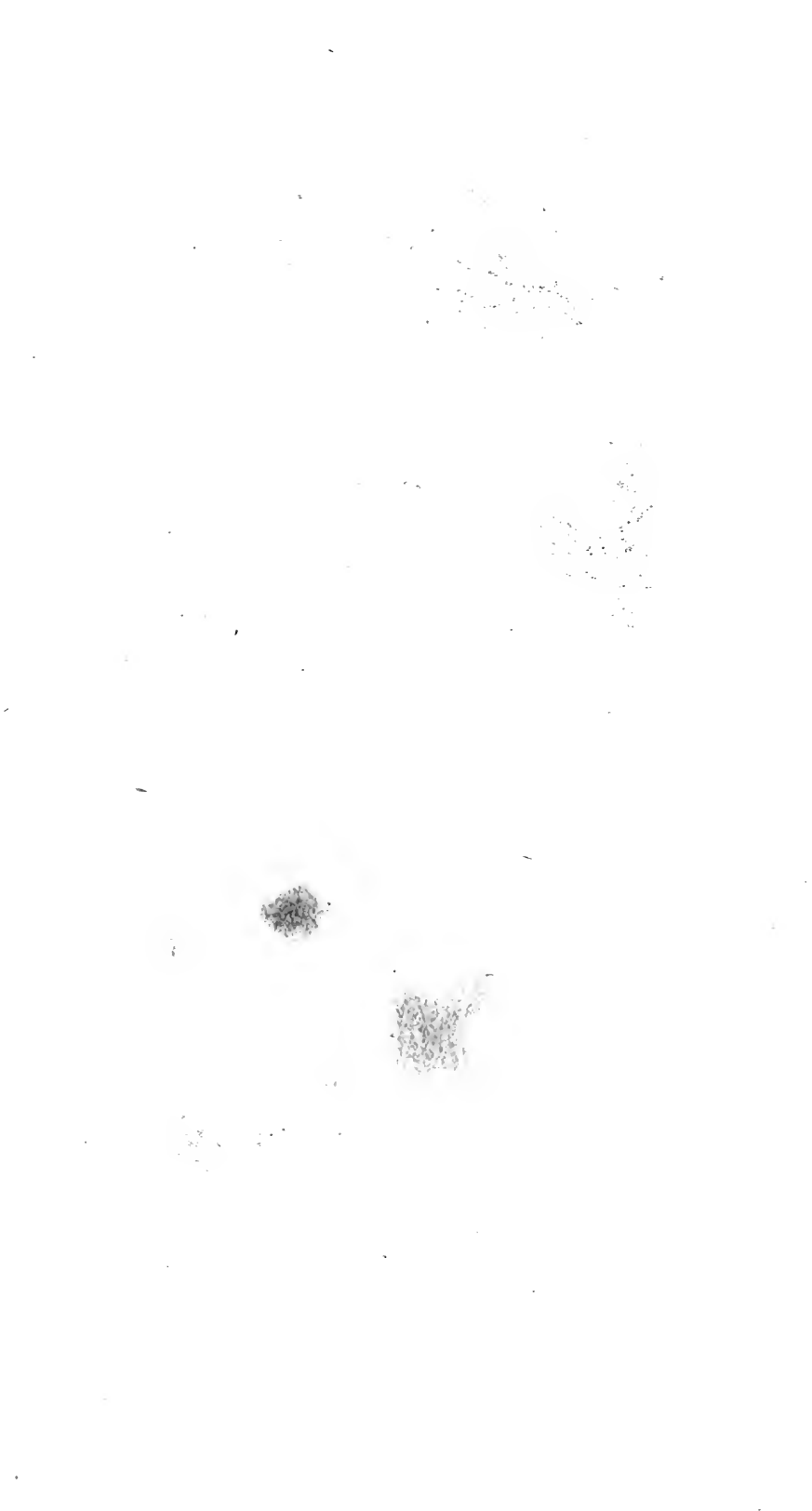
Above all, to prevent these diseases, be sure to keep them very clean and warm, always putting dry soft gravel in the bottom of their cages, taking care never to let them want fresh water and wholesome food; and sometimes put in their water a blade or two of saffron, and a slice of liquorice, which will make him long-winded, and help him very much in his song.

When taken old he is apt to be sullen at first, and refuse to eat his meat, but by giving him a few worms cut small amongst a little fresh earth, crumbs of bread, &c. in the bottom of his cage, in two or three days he will

will take his meat freely enough; a young cockbird, when taken by a trap, will sing in as short a time.

As to the extent of this bird's life, he seldom lives above seven years, because he is so subject to the falling sickness, cramp, and oppression of the stomach.*

* The robin-redbreast is the most early of all the birds; he is heard at the first dawn of day, and he sings the latest of any in the evening. Of all birds that live in a state of liberty, he is the least wild: he will let himself be approached so near, that it appears possible to take hold of him with the hand, but no sooner is the hand extended than he goes a little distance off. Buffon saw one so tame, that he would perch upon the inkstand while the gentleman was writing.





46.

FIG.

45.

Crested Wren.

Wren.



FIG. 47. 48. 49.

Humming Birds

THE COMMON WREN:

THIS is the smallest bird found in this kingdom, except the golden-crowned wren; it weighs about three drachms; its length, from the point of the bill to the end of the tail, is about four inches. It commonly creeps about hedges and holes, making but short flights, and, if it be driven from the hedges, may easily be tired and run down. It will sit upon a barn, or tree, about farm-yards, where it mostly frequents, and sing exceedingly fine; when kept in a cage, it will sing very sweetly, and with a higher and louder voice than could be expected from its strength and bigness; it is a very pleasant bird, that will sing a great many months in the year. Many persons have kept these birds a long time in a cage, and have had them sing as stout as if they were in the fields, and with equal freedom and mellowness of voice.

The

The cock is of a dark colour; the head, neck, and upper parts of the body, are of a mixed brown; the throat of a palish yellow; the breast more inclined to white, the belly of a dusky-coloured red; the tips of the wings, and covert-feathers of the tail, are beautifully variegated with a few yellowish and blackish spots upon them. The hen-bird is all over of a reddish brown colour, excepting the lines across her tail and wings, which are black and reddish. The bird with the largest eye is generally thought to be a cock. But the difference can hardly be known, till the cock begins to record and sing.

The wren has young ones in May; she builds her nests sometimes in the holes of old walls, and frequently in the eaves of thatched buildings, but more commonly in woods and hedges, in a very artificial manner: it is of a sort of oval form, resembling an egg, covered over at top, and has in the middle of the side a small round hole to go in and out at. The outside is of green moss and fog, the inside of hair, wool, and feathers, on which the hen lays sometimes to the number of fifteen or sixteen eggs; but she often does not hatch half that
number

number; they are very small white eggs, sprinkled all over with small red spots.

In taking the young from the nest, they should be till they are well feathered. In rearing they should be fed and treated like young nightingales and robins, giving them but little at a time. When they are grown fit for a cage, they should have a large one, made with very close wire, with three sides wood, and one side wire; it requires to be lined with a cloth or bays, for keeping them warm: though it is a very small bird, yet a small cage does not agree with it, nor with any bird whatsoever, though it is often practised.

In the winter time especially, they must be kept very warm and clean, and frequently have dry gravel given them in their cage.

CRESTED, OR GOLDEN WREN.

THIS also is said to be among the smallest birds found in this kingdom, not weighing more than three drachms, and has a slender

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straight

straight black bill; it has an exceedingly beautiful small row of feathers on the top of the head, of a fine gold or orange colour, which it has a power of drawing together in such a manner as entirely to conceal the little crest, by laying the feathers all flat upon the head, and it can also raise them at pleasure; the form of them is long, as they take their rise from the base of the bill, and extend themselves to the back of the head, on each side of which there runs a black line: the eyes are encircled with white, the sides of the neck are of a fine shining yellowish green, the breast of a dusky white; the back is of a greenish colour, with a mixture of yellow. The quill-feathers of the wings are of a dusky brown, with some of their edges yellow, others white; the tips of some of those next to the covert feathers are also white, and the tips of some of the coverts being of the same colour, form a white line across the wing. The tail is of a dusky colour, about an inch and a half long, with some of the edges of the feathers of a yellowish green; the feet and claws are pretty near of the same colour.

They lay six or seven very small eggs, not larger than peas, and feed upon small insects.

They

They are found in some of the woods about Oxford, also in Warwickshire, about Middleton Park, and in several places in Wales. It is a beautiful, but not very common bird. It has sometimes been found in the southern parts of Scotland.

THE RED-START.

THIS bird is so named from its red tail, and is in size something less than the robin-red breast. The cock is very fair, beautifully coloured, and exceeding pleasant to the eye. His breast, rump, and tail, are of a fine red; the back, neck, and hind-part of the head, of a lead colour; the fore-part of his head, and throat, of a jet black, and he has a white mark upon his pole.

The hen is also a beautiful bird; and partakes much of the colour of the nightingale, with a red tail, something fainter than that of the cock. The cock is known at all times

from the hen, by his black head; that mark being peculiar to the male only.

These birds breed in May, and have young ones fit to be taken, about the middle of that month. They commonly build in holes of trees, or under house eaves, and make their nests with all sorts of things, such as dry grass, small roots of herbs, leaves, horse-hair, wool, &c. Their eggs are like those of the hedge-sparrows, but of a paler blue, and not so big.

With regard to their nest, they are the most shy of all birds; for if they perceive themselves observed when building, they will forsake the nest; if any of their eggs are touched, they never come near them any more; and if they chance to have young ones the hen will either starve or throw them out of the nest, and break their necks; so exceedingly watchful is she, that it is almost impossible to go near it without her knowledge.

They are of a very sullen disposition; and if taken after flight, will not for some days even look at their meat, and though they will at last take to feeding, they are a long time before they sing; but if brought up from the nest, they are gentle and tame. They must be taken out of the nest at about ten days old;
for

for if left there too long, they are apt to learn some of the old bird's temper, and be very sullen.

Feed them with sheep's heart and egg, minced very small, like that for the nightingale and robin, giving them but little at a time.

They may be kept in what cage you please; only let them be kept warm in the winter, and they will sing in the night as well as the day; they will also learn to whistle and imitate other birds.

When wild they feed upon insects like the robin, &c. They are supposed to emigrate in the winter, since very few of them, comparatively speaking, are seen in this country during that season.

THE WHITE THROAT.

THIS is a small bird that weighs about half an ounce, the bill not above half an inch long, the upper chap black, the lower white; the tongue is forked or slit at the point, and
the

the inside of the mouth of a yellowish colour; the upper part of the head is of a dark ash-colour; and the rest of the body and wings of a light brown, with a reddish cast, or shade; some of the edges of the quill-feathers white; the breast, throat, and belly white, with a few pale shady marks interspersed here and there, both upon the breast and belly. The fore toes small, the hind toe more large.

They come into most parts of the kingdom in the spring, and leave us in the latter end of summer; and are in some places called willow witches, I suppose from their being found frequently by the sides of small ponds of water, where they creep in the low shady bushes, hopping up and down upon the withy and willow bushes. They build their nests generally on the sides of ditch banks, under the small bushes, where they lay five or six small dusky coloured eggs, of a greenish white colour, and spotted with black. They feed on flies and small insects.

THE TIT-MOUSE.

THE Titmouse, or, as it is more generally called, the Tom-tit, is also a small bird; and it has a straight black bill, about half an inch long, pretty thick. The upper part of the head, and the chin are black, with a large spot of white beginning at the base of the bill, and passing under the eyes to the sides of the neck; it has a white line upon the hinder part of the head, which separates the black of the head from the yellow colour of the neck; which colour descends as low as the shoulders and middle part of the back, where it appears more shaded with a glossy green; the rump is of a fine blue. The quill-feathers have some of their tips white, some blue, others green, the covert feathers by their white tips, make a small transverse white line upon each wing. The breast, belly, and thighs, are yellow, with a broad black line
passing

passing from the throat down the middle of the breast to the vent. The tail is about two inches and a half long, of a black colour, except the outward edges of some of the feathers, which are blue. The legs and feet are of a sort of lead colour.

The *bearded tit-mouse* is not so large as the former, the bill is thick and short, of a yellowish colour; the head is of a dark ash-colour, with a tuft of feathers that begin at the base of the bill, and are continued beyond the eyes, which hang down upon the sides of the neck in a sort of picked, triangular form; from which it is said to take the name of *beard-manica*. The back, wings, and upper part of the body are brown, the breast and lower parts of a yellowish white, shaded with a dusky brown; the outmost feathers on each wing are white, with two remarkable white spots on the upper coverts. The tail is of a brown colour, about two inches long.

The hen is more beautiful than the cock, not quite so large, of a more yellowish brown, and has not the beard; the cock is said to be exceeding fond of her, and covers her all the night, while at roost, with his wing. They are not very common in many parts of the kingdom, but are more frequently seen in the
fens

fens in Lincolnshire, and in some parts of Essex.

The *long-tailed tit mouse* has a short strong black bill, with a number of small feathers growing about the nostrils; the eyes are large, the iris of which is hazel coloured, and the edges of the lids yellow. The crown of the head is white with a large black scolloped mark in a circular form over each eye, which extends itself to the hinder part of the head. The back is of a light brown or chesnut colour, with a few black spots upon it; the quill-feathers black, with some of their edges white; the breast and belly are white, interspersed with small dusky spots. The tail is very long, and shaped like that of the magpie, the shafts of some of the outer feathers white, and some few of the tips of the same colour. The legs and feet black.

It forms a very artful nest resembling that of the wren, and for an account of which we refer to Derham's *Physico-Theology*, p. 232, 233.

“ Among many instances that might be
 “ given of the subtlety of birds, and other
 “ creatures, that of the long-tailed titmouse
 “ deserves observation, who with great art
 “ builds her nest with moss, hair, and the

“ web of spiders cast out from them when
“ they take their flight, with which the other
“ materials are strongly tied together. Hav-
“ ing neatly built, and covered her nest with
“ these materials; without she thatcheth it
“ on the top with the *muscus arboreus ramosus*,
“ or such like broad whitish moss, to keep
“ out rain, and to dodge the spectator’s eye:
“ and within she lineth it with a great num-
“ ber of soft feathers; so many, that I confess
“ I could not but admire how so small a room
“ could hold them, especially that they could
“ be laid so close and handsomely together, to
“ afford sufficient room for a bird with so long
“ a tail, and so numerous an issue as this bird
“ commonly hath.”

These birds are said to be very beneficial in the spring to the trees, by destroying the young caterpillars, and likewise the eggs of those insects that so commonly destroy the fruit, which they do by tearing the webs to pieces, and eating up the animalcula that are inclosed in them.

THE WATER-WAGTAIL.

THIS is a slender-bodied bird, and weighs about six drachms; it is about seven inches and a half, from the tip of the bill to the end of the tail, and about eleven from the point of each wing when extended. It has a slender, straight, sharp bill, of a black or dusky colour, upwards of half an inch long: the circles of the eyes are brown, or hazel coloured, with a large white spot encircling each eye, and another or two underneath it, on each side of the throat; the top of the head and the fore part of the neck, or throat, and the upper part of the back, are all black. Some of the tips of the quill-feathers are white, which form a small white line upon the wing, and another is also formed by the white edges of some of the rows of the covert feathers; the lower part both of the breast and belly is white.

The tail is about three inches long, which is almost continually in motion, wagging up

and down, and whence it is supposed to derive the name of *wagtail*; the external feathers are whitish, the rest are black. The claws are sharp, pointed, and pretty long, of a dusky, or blackish colour.

They are frequently seen about the brinks of rivers, ponds, and small pools of water, and also amongst the low grass in dewy mornings, where they feed upon flies, worms, beetles, and other small insects. They build under the eaves of houses, and in holes in the walls of old buildings; they lay four or five eggs.*

* The wagtail is to be found in the whole of Europe, even in Sweden, and also in Asia and Africa. Olin is probably mistaken when he says that the wagtail is to be seen in Italy only during the autumn and winter, for it is not probable that these birds would stop in this climate, when it is known that they pass on to countries much farther and much warmer.

THE STONE-CHATTER.*

THIS is a small sized bird, and does not weigh much more than half an ounce; the bill is of a blackish dusky colour, not half an inch long, the tongue a little cloven at the end, the eyes of a brown or hazel colour. The head is large and nearly wholly black, the throat under the bill, and the upper part of the back, are of the same colour, in the cock bird; but the hen is more pale, and inclining to a sandy, or dirty coloured red. It has a large white spot upon each side of the neck, which at a little distance looks like a collar

OF

* This bird make its nest in uncultivated grounds, at the foot of bushes, under their roots, or under the cover of a stone; they enter it as it were by stealth, as if they feared to be seen; it is built towards the end of March. The stone-chatter is a very solitary bird, and is never seen in company with any of its own species, except during the time of their amours. In its disposition it is wild, and in instinct dull. However agile and lively in a state of liberty, he is heavy and stupid in that of domesticity; he acquires nothing by education: he is reared with difficulty and without advantage.

or ring; with another considerably smaller upon the rump. The breast is of a paleish orange colour, but more fading and pale on the lower part of the belly. The feathers on the wings are of a dusky colour; both the prime and coverts have their edges red, with a pretty large white spot upon each side.

The tail is about two inches long, of a dusky colour, with the tips and some of the webs of the external feathers upon the sides white. The legs and feet black.

They are found chiefly upon heaths and commons, amongst the goss and ling; where they feed upon worms, beetles, and other small insects.

The hen is distinguished from the cock, by having her feathers upon the head and upper parts of her body, a great deal more of a reddish colour, with a shade of green, the rump being quite red; the feathers under the chin are ash-coloured, and those lower upon the breast, of a deeper colour than the cocks.

THE HEDGE-SPARROW.

THIS is considerably less than the common sparrow; it has a pretty long slender bill, of a dusky or bluish colour, and more slender than the rest of those which come under the denomination of sparrows.

This is not so despicable a bird as a great many imagine; for it has very delightful notes in its song, and much variety; they sing very early in the spring, and are frequently kept in cages by curious persons, who value them much.

The cuckoo, who builds no nest of her own, generally drops her egg in the nest of this bird, where it is hatched by the hedge-sparrow to the certain destruction of her own young.

The cock's head is of a dusky-coloured brown, with a sort of bluish cast; the upper part of his body is of a dark brown, with a very small mixture, or rather shade of red; the breast of a bluish or red colour, with a few small shady spots upon it; the belly more duskish. The hen is known from the cock,
being

being considerably paler upon the breast, and the colour upon her back more bright.

They have young ones generally about the latter end of April, or beginning of May, and build their nest almost in every hedge, low and open, so that it may be found with little difficulty. It consists chiefly of fine green moss, and the inside lined with a little hair, on which the hen commonly lays five eggs, very different from other birds, being of a pale blue, or sea-green colour.

The hedge-sparrow will feed almost on any thing you can give him; he is a very tractable bird, and will learn to pipe, whistle, or imitate the song of almost any other bird with whom he is brought up from the nest.*

* M. Daubenton had a hedge-sparrow which was taken in autumn, and was not more wild than if it had been taken in the nest. It was put into an aviary filled with canary birds, linnets, and goldfinches: a canary bird attached itself so much to this hedge-sparrow that he never quitted it: this preference indeed appeared so marked that M. Daubenton took them from the aviary, and put them by themselves in a cage in hopes that they would copulate; but it appeared that this attachment was nothing but friendship. It is probable that had it been love, no issue would have proceeded from it.

THE HUMMING BIRD.

AMONG the beautiful varieties of the feathered race there are but few that equal, and none that surpass the brilliancy of colouring displayed in this little animal, which, in fact, may be considered as one of the most splendid gems in animated nature, and of which it is almost impossible to give an adequate idea, even by the most minute description. This species consists of several varieties, the largest not being above half the size of a common wren, and from which they gradually decrease to that of an humble bee. They have been already so ably treated by a celebrated author that we cannot do better than repeat his very words. “A

“bird,” says he, “not so big as the end of one’s
“little finger, would probably be supposed but
“a creature of imagination, were it not seen in
“infinite numbers, and as frequent as butter-
“flies in a summer’s day, sporting in the fields

“ of America, from flower to flower, and extracting their sweets with his little bill.

“ The smallest humming bird is about the size of a hazel nut. The feathers on its wings and tail are black ; but those on its body, and under its wings, are of a greenish brown, with a fine red cast or gloss, which no silk or velvet can imitate. It has a small crest on its head, green at the bottom, and, as it were, gilded at the top, and which sparkles in the sun like a little star in the middle of its forehead. The bill is black, straight, slender, and of the length of a small pin. The larger humming bird is near half as big as the common wren, and without a crest on its head ; but, to make amends, it is covered, from the throat half way down the belly, with changeable crimson coloured feathers, that, in different light, change to a variety of beautiful colours, much like an opal. The heads of both are small, with very little round eyes, as black as jet.

“ It is inconceivable how much these add to the high finishing and beauty of a rich luxurious western landscape. As soon as the sun is risen, the humming-birds, of different

“ ferent

“ferent kinds, are seen fluttering about the
“flowers, without ever lighting upon them.
“Their wings are in such rapid motion, that
“it is impossible to discern their colours, ex-
“cept by their glittering. They are never
“still, but continually in motion, visiting
“flower after flower, and extracting its honey
“as if with a kiss. For this purpose they are
“furnished with a forky tongue, that enters
“the cup of the flower and extracts its nec-
“tared tribute. Upon this alone they subsist.
“The rapid motion of their wings brings out
“a humming sound, from whence they have
“their name; for whatever divides the air
“swiftly, must thus produce a murmur.

“The nests of these birds are not less curi-
“ous than the rest; they are suspended in
“the air, at the point of the twigs of an
“orange, a pomegranate, or a citron-tree;
“sometimes even in houses, if they find a small
“and convenient twig for the purpose. The
“female is the architect, while the male goes
“in quest of materials; such as cotton, fine
“moss, and the fibres of vegetables. Of these
“materials a nest is composed, of about the
“size of a hen’s egg cut in two, admirably
“contrived, and warmly lined with cotton.

“ They lay two eggs at a time, and never more,
“ about the size of small peas, and as white
“ as snow, with here and there a yellow speck.
“ The male and the female sit upon the nest
“ by turns; but the female takes to herself the
“ greatest share. She seldom quits the nest,
“ except a few minutes in the morning and
“ evening, when the dew is upon the flowers,
“ and their honey in perfection. During this
“ short interval, the male takes her place; for,
“ as the egg is so small, the exposing it ever
“ so short a time to the weather, would be apt
“ to injure its contents, the surface exposed
“ being so great in comparison to the bulk.
“ The time of incubation continues twelve
“ days; at the end of which the young ones
“ appear, much about the size of a blue-bottle
“ fly. They are at first bare; by degrees they
“ are covered with down, and at last feathers
“ succeed, but less beautiful at first than those
“ of the old ones.

‘ Father Labat’s companion, in the mission
‘ to America, found the nest of a humming-
‘ bird, in a shed that was near the dwelling-
‘ house, and took it in at a time when the young
‘ ones were about fifteen or twenty days old;
‘ he then placed them in a cage at his chamber
‘ window,

‘ window, to be amused by their sportive flut-
‘ terings ; but he was soon surprised to see the
‘ old ones, that came and fed their brood re-
‘ gularly every hour in the day. By these
‘ means they themselves soon grew so tame,
‘ that they seldom quitted the chamber ; but,
‘ without any constraint, came to live with their
‘ young ones. All four have frequently come
‘ to perch upon their master’s hand, chirruping
‘ as if they had been at liberty abroad. He fed
‘ them with a very fine clear paste, made of
‘ wine, biscuit, and sugar, they thrust their
‘ tongues into this paste, till they were satis-
‘ fied, and then fluttered and chirruped about
‘ the room. I never beheld any thing more
‘ agreeable, continues he, than this lovely lit-
‘ tle family that had taken possession of my
‘ companion’s chamber, and that flew out and
‘ in just as they thought proper ; but were ever
‘ attentive to the voice of their master when he
‘ called them. In this manner they lived with
‘ him for above six months ; but at a time
‘ when he expected to see a new colony form-
‘ ed, he unfortunately forgot to tie up their
‘ cage to the ceiling at night, to preserve them
‘ from the rats, and he found they were de-
‘ voured in the morning.’

“ These

NATURAL HISTORY

“ These birds, on the continent of America,
“ continue to flutter the year round ; as their
“ food, which is the honey of flowers, never
“ forsakes them in those warm latitudes where
“ they are found. But it is otherwise in the
“ islands of the Antilles, where, when the
“ winter season approaches, they retire, and
“ as some say, continue in a torpid state
“ during the severity of that season. At
“ Surinam and Jamaica, where they con-
“ stantly have flowers, these beautiful birds
“ are never known to disappear.

“ It is a doubt whether or not these birds
“ have a continued note in singing. All
“ travellers agree, that, beside the humming
“ noise produced by their wings, they have
“ a little interrupted chirrup ; but Labat as-
“ serts, that they have a most pleasing melan-
“ choly melody in their voices, though small
“ and proportioned to the organs which pro-
“ duce it. It is very probable, that, in dif-
“ ferent places, their notes are also different ;
“ and, as there are some that continue torpid
“ all the winter, there may likewise be some
“ with agreeable voices, though the rest may
“ in general be silent.

“ The

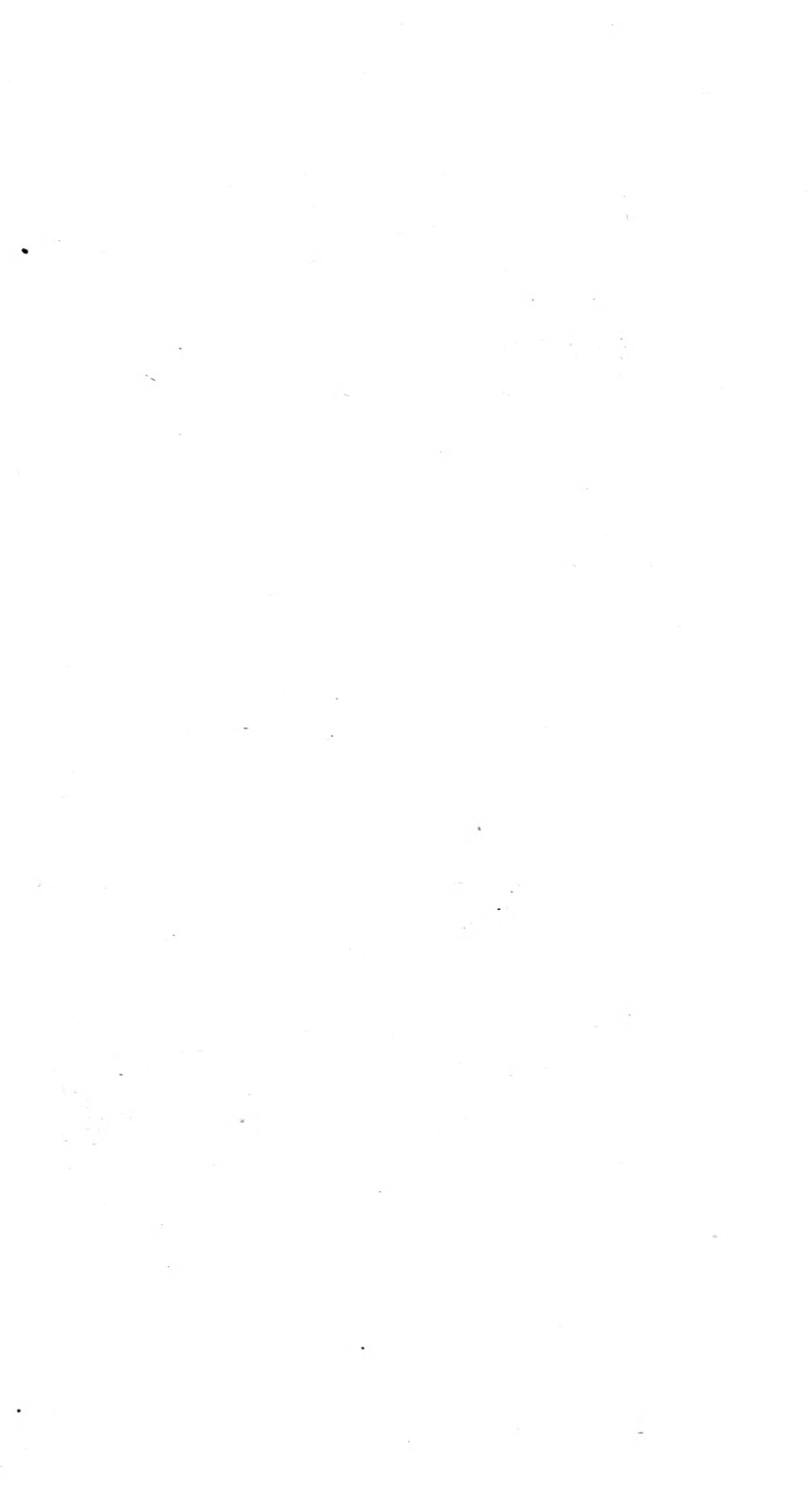
“ The Indians formerly made great use of
“ this pretty bird’s plumage, in adorning
“ their belts and head-dress.

“ The children take them in the fields
“ upon rings smeared with bird-lime, in the
“ following manner: they approach the place
“ where the birds are flying, and twirling their
“ rings in the air, so allure them, either by the
“ colour or the sound, that the simple little
“ creature comes to rest upon the ring, and
“ is seized. They are then instantly killed
“ and gutted, and hung up in the chimney
“ to dry. Those who take greater care, dry
“ them in a stove, which is not so likely
“ to injure the plumage as the foregoing me-
“ thod.

“ Their beautiful feathers were once the
“ ornament of the highest rank of savage no-
“ bility; but at present, they take the bird
“ rather for the purpose of selling it as a cu-
“ riosity to the Europeans, than that of orna-
“ ment for themselves. All the taste for sa-
“ vage finery is wearing out fast, even among
“ the Americans. They now begin to adopt,
“ if not the dresses of Europe, at least the
“ materials of which they are composed.—
“ The wandering warrior is far from thinking
“ himself

“ himself fine at present with his bow and
“ his feathered crown ; his ambition reaches
“ to higher ornaments ; a gun, a blue shirt, and
“ a blanket.” *

* Buffon estimates above twenty different species of the humming bird ; and to these his late editor, Sonnini, has added several varieties of the same.





Chaffinch.

Canary Bird.



Virginian Nightingale.

Green Finch.

THE CANARY BIRD.

WE have now come to those which Willoughby has arranged under the thick bills, at the head of which we shall place the Canary bird, both from its being so universally known and admired, and because in its history is contained the peculiarities belonging to the whole tribe. Our celebrated original, Buffon, whom we feel a pleasure in following on every occasion, has given a pretty long account of this bird; he says, If the nightingale is the chanteress of the woods, the canary-bird is the musician of the chamber; the first owes all to nature; the second derives something from our arts. With less strength of organ, less compass of voice, and less variety of note, the canary-bird has a better ear, greater facility of imitation, and more memory; and as the difference of genius, especially among the lower animals, depends in a great measure on the difference that exists among them with regard to the perfection of their senses, the canary-bird, whose organ of hearing is more attentive,

more susceptible of receiving and retaining foreign impressions, becomes accordingly more social, more tame, and more familiar; it is capable of gratitude, and even of attachment; its caresses are endearing, its little humours are innocent, and its anger neither hurts nor offends. Its natural habits likewise attach it to us; it eats seeds like our other domestic birds: it is more easily bred than the nightingale, which lives on flesh or on insects, and which can be reared only with prepared food. Its education is more easy and more successful; we breed it with pleasure, because we are able to instruct it; it leaves the melody of its natural note to listen to the harmony of our voices and instruments; it applauds, it accompanies us, and repays the pleasures it receives with interest. The nightingale, more proud of its talent, seems willing to preserve it in all its purity; at least, it appears very little to value ours; and it is with the greatest difficulty it can be taught to repeat any of our airs. The Canary can speak and whistle; * the nightingale despises our words as well as our song, and never fails to return

* A canary-bird will learn to talk, and will articulate many little things very distinctly. M. Hebert, Receiver-General at Dijon, communicated a curious fact to Buffon: a canary-

return to the warbling of its own wild wood-notes. Its pipe is a master-piece of nature which human art can neither alter nor improve; that of the canary-bird is a model of more pliant materials, which we can mould at pleasure. This last, therefore, contributes in a much greater degree to the comforts of society; it sings at all seasons; it cheers us in the dullest weather, and even adds to our happiness; for it amuses the young, and delights the recluse, it charms the tediousness of the cloister, and exhilarates the soul of the innocent and the captive; its little amours, which we can contemplate while we make it breed in our cages, have a thousand times re-kindled the dying flame of love in hearts where it seemed to have been extinguished. Is not this doing as much good as our vultures do harm?

The happy climate of the Hesperides* seems to be the native place of this charming bird, at least it seems there to attain its highest degree of perfection; for we know that there is in Italy a species much smaller than that

O 2

of

a canary-bird which had been placed very young near his desk, acquired a singular melody:—he imitated the noise made by the counting out of money.

* It is now generally believed that the Hesperides of the ancients was the Canary Islands.

of the Canaries, and in Provence another almost as large; both of these are wilder, and may be considered as the stocks of some tamed race. These three birds will breed in a state of captivity; but in their native regions they seem to propagate without intermixture. They therefore form three permanent varieties, which it is proper to distinguish by three different names, that they may not be confounded. The large one was called Cinit or Cini in the days of Belon, and in Provence it retains the name of Cini or Cigni to this day. The least one is called Venturon in Italy.

The Venturon is found not only in Italy, but in Greece, in Turkey, in Austria, in Provence, in Languedoc, in Catalonia, and probably in all the climates of that temperature. There are, however, certain years in which it is very rare in our southern provinces, particularly at Marseilles. Its song is agreeable and varied; the female is inferior to the male both in song and plumage. The form, colour, voice, and food, of the Venturon and Canary-bird, are nearly the same, only the Venturon is smaller, and its notes are neither so fine nor so clear.

The Cini of Provence is larger than the Venturon, and has a louder note: it is remarkable
for

for the brightness of its colours, and for the strength and variety of its song. The female is somewhat larger than the male, has less yellow in its plumage, does not sing so well, or rather answers him as it were only by monosyllables. This bird feeds on the smallest seeds he can find in the fields ; he lives long in a cage, and seems to delight in being placed near the goldfinch, whose notes he listens to, and at length borrows some of them to incorporate with his own. It is found not only in Provence, but in Dauphiny, Geneva, Switzerland, Germany, Italy, and Spain. It is the bird known in Burgundy by the name of the Canary. It builds upon the osiers planted along the banks of the rivers ; and its nest is formed of hair within and moss without. It is pretty common in the environs of Marseilles, and in the southern provinces of France, but rare in the northern. M. Lottinger says, that in Lorraine it is a bird of passage.

The prevailing colour of the Venturon, as of the Cini, is a yellowish green on the upper part of the body, and greenish yellow on the belly ; but the Cini, which is larger than the Venturon, likewise differs from it in having brown spots, which are longitudinal on the upper part of the body, and waved on the under ;

under; while in our climates the ordinary colour of the Canary-bird is a uniform citron yellow over the whole body, even on the belly. This, however, is to be understood only of the extremities of the feathers, all the other parts of them are white. The female is of a paler yellow than the male. But this citron colour, inclining more or less to white, which the Canary-bird wears in our climate, is not its colour in its native place, and it varies according to the temperature of the country it inhabits.—“ I have observed (says Mr. Adanson), that the Canary-bird which becomes white in France, is at Teneriffe almost as grey as a linnet: a change proceeding I suppose from the coldness of the climate.”—The colour may alter likewise from diversity of food, from captivity, and especially from intermixture with other species. At the beginning of this century, bird-fanciers reckoned, in the single species of the Canary-bird, no less than twenty-nine varieties, all so distinguishable as to be easily pointed out. The original stock of these twenty-nine varieties, is the common grey finch of the Canary Islands. All those that are of other uniform colours have received them from difference of climate: those with red eyes are generally more or less inclined to
absolute

absolute whiteness, and those with different colours are varieties rather fictitious than natural.

Besides these differences, which appear to be the first variations from the pure stock of the Canary Islands when transported into other countries; and besides some new races which have appeared since, there are other varieties still more apparent, arising from a mixture of the Canary-bird with the Venturon and Cini; for these birds may not only be made to pair and breed, but their young, which are generally considered as mules and sterile, are notwithstanding mongrels that are capable of propagating their race. It is the same in the junction of the Canary-bird with the siskin, the gold-finch, the linnet, the yellow-hammer, the chaffinch; it is even said that it will produce with the sparrow. These species of birds, although very different, and to appearance very remote from that of the Canary-bird, will, notwithstanding, unite with it and breed, if proper care and precaution be used in pairing them. The first thing necessary is to separate the Canary-birds from all those of their own species; and the second is, to employ the female rather than the male. I have been assured

sured that the hen Canary-bird will produce with all the above-mentioned birds ; but it is not equally certain that the cock will unite with the females of those birds. The siskin and the gold-finch are the only ones that seem to have their fertility with the cock Canary-bird authenticated. The following was written to me on the subject by a friend of mine, a man of experience and probity :

‘ I have these thirty years amused myself in rearing a number of small birds, and I have particularly attended to the method of breeding them ; it is therefore from repeated experience and observation that I am enabled to assert the following facts: When a person wishes to pair the Canary-bird with the gold-finch, he must take young gold-finches, of ten or twelve days old, from the nest, and put them in a nest with Canaries of the same age. He must feed them together, and leave them in the same cage, accustomed the gold-finch to the same food with the Canary-bird. It is usual to put a cock gold-finch to a hen Canary-bird, as they pair much more easily, and prosper better than when a hen gold-finch and cock Canary-bird are associated. It must however be observed, that the brood in the first case is later, because the
cock

cock gold-finch does not pair so quickly as the cock Canary. But when the female gold-finch is put to a male Canary-bird, the pairing takes place much sooner. To succeed, a male Canary-bird is never to be put into a cage where there are females of its own species, for then he will prefer these to female gold-finches.

‘ With regard to the union of the male Canary with the female siskin, I can vouch that it prospers exceedingly well. I have had in my aviary these nine years, a female siskin which never failed to have three broods the first five years; and all these prospered; for the last four years she has had only two broods. I have other birds of the same species of the siskin, which, without having been bred up together, or placed apart, have paired with Canary-birds. The male or female siskin is merely put into a room with a good number of those birds; they will soon be coupling at the same time with other Canaries; while the gold-finch only couples with the Canary-bird when in a cage; and then too only when there is no bird there of its own species. The siskin lives as long as the Canary-bird, it accustoms itself to the same food with less repugnance than the gold-finch.

‘ I have also put linnets and Canary-birds together: but they will seldom breed except the cock linnet be put with the hen Canary-bird; the female linnet will not even make a nest, but drops a few eggs in the cage, which are generally addle. I know this by experience, as I have often made the hen Canary-bird sit on them without effect.

‘ The chaffinch and yellow-hammer are with great difficulty made to pair with the Canary-bird. I left a female yellow hammer with a male Canary for three years, the hen laid only addle eggs; it is the same with the female chaffinch; but the cock chaffinch and yellow-hammer with the hen Canary-bird have produced some fertile eggs.’

From these facts, and some others which I have collected, it is evident that among all these birds the siskin alone will breed with the Canary-bird equally well, whether male or female; the hen Canary-bird produces, likewise, easily enough with the male goldfinch; not quite so easily with the male linnet; and, lastly, it will breed, though with more difficulty, with the males of the chaffinch, the yellow-hammer and sparrow, while the male Canary is incapable of fecundating the females of any of these last. Nature is therefore

therefore more ambiguous and less constant, and the mould of the species less firm, in the female than in the male; the latter is the true model; its structure is stronger than that of the female, which is subject to various modifications and alterations by a mixture with other species.

- The first variety which seems to constitute two distinct races in the species of the Canary-bird is formed of the variegated and the plain, (or the spangled and gay birds, as they are termed in London.) The white are never variegated, neither are the citron coloured: but when these last have attained the age of four or five years, the extremities of the wings and tail become white. The grey are not of a uniform colour; on the same bird there are feathers more or less grey; and in many of these birds, the grey is lighter or darker, more inclined to the brown or the black. The agates are of a uniform colour, but there are some where the agate colour is lighter or darker. Those inclining to a cream colour are still more uniform; the yellow is constant both in the same bird, and in the different individuals. In the variegated, or spangled birds, those that are of a jonquil yellow are tinged with black, and there is

generally a spot of black on the head. There are variegated individuals with all the simple colours we have mentioned, but those of the jonquil colour are only variegated with black.

When individuals of a uniform colour are paired together, their young are of the same colour: a cock and hen that are grey generally produce grey birds: but if a male grey is put to a female white, or a male white to a female grey, the brood will be more beautiful than the parents; and as the number that may be crossed by such combinations are inexhaustible, we can at all times produce varieties in shade and tint that have not appeared before. The mixtures that may be made of the spangled birds with those of a uniform colour increase still more the number of combinations that may be produced; and thus varieties in the species may be multiplied to infinity. It likewise often happens, that without the assistance of the fancy-birds, we have pretty little variegated birds which owe their beauty to the mixture of the different colours in their parents or their progenitors, some of which, either on their father or mother's side, may have been variegated.

With

With regard to the mixture of other species with the Canary-bird, I have collected the following observations: Of the whole species, the Cini, or green Canary, has the strongest pipe; it is the most vigorous and most ardent for propagation: it may suffice for three females; it feeds them on the nest as it does the young. The siskin and the gold-finch are neither so vigorous nor so attentive, and are content with a single female Canary-bird.

The birds that come from the junction of the cini, the siskin, and the gold-finch, with a hen Canary-bird, are generally stronger than those from a cock and hen Canary-bird. They sing longer, their voice is more sonorous and firm, but they are taught with difficulty; they mostly whistle imperfectly, and one is seldom to be found which can repeat a single air without missing.

When we would wish to procure birds from a mixture of the gold-finch with a hen Canary-bird, the former must be two years old, and the latter one; because the Canary-bird comes sooner to maturity than the gold-finch, and in general they succeed best when they have been bred up together. This, however, is not absolutely necessary, and the author of the 'Treatise on Canary-birds is mistaken when he cautions us against using a
hen

hen that has formerly hatched with a cock of its own species, as if that would prevent her from receiving the male of another species. 'I happened, (says Father Bougot) to put four males to eight female Canary-birds; some bad seed poisoned three of the males, and all the females lost their first eggs; I resolved to substitute three male gold-finches taken in a trap in place of the three dead Canaries, and I put them into the cage about the beginning of May. Towards the end of July I had two nests of mongrels which succeeded to admiration; and the following year I had three broods with each gold-finch and hen Canary-bird. These last do not in general breed with the gold-finch but from one to four years old; while with their own species they continue to hatch for nine or ten years. The common variegated female alone will breed with the gold-finch beyond her fourth year. A gold-finch must never be let loose in an aviary, for he destroys the nest, and breaks the eggs of the other birds.' We see then that hen Canary-birds, though accustomed to the males of their own species, will yield to the caresses of the gold-finch, and will breed with these birds successfully. Their union with these is even as fruitful as with their own males, since they lay three times

times in the year with the gold-finch: it is not so in the union of the male linnet with the hen Canary-bird; in this case there is generally only one brood, and very seldom two, in the year.

The bastard birds which proceed from the Canary and the siskin, gold-finch, &c. are by no means sterile; * but mongrels that can pair and propagate, not only with their races by father and mother, but with themselves, and produce offspring that can also pair and perpetuate their varieties. But it must be owned, that the produce of these mongrels is not so certain nor so numerous as in the pure species: they seldom hatch more than once in a year, and often lay eggs that are addle. The successful production depends on many little circumstances which cannot be discovered, far less pointed out. It is said, that among these mules there are always many more males than females. ‘A female Canary-bird and a gold-finch, (says Father Bougot), produced in the same year, at three hatchings,

* M. Sprengel has made many experiments and observations upon mule canaries, and he assures us that mules, proceeding from these birds, have multiplied with each other, and with their paternal and maternal races; the proofs which he gives of this leaves no room for doubt; though it has always been supposed before his time that the mule canary-bird was sterile.

ings, nineteen eggs that were all fertile; among the nineteen there were only three females, the other sixteen were males.' It were to be wished that this fact could be ascertained by repeated observations. It remains therefore to determine by experiment (and this will not be difficult) how many males and how many females are produced in the pure species of the Canary-bird, and then to observe if the number of males is greater in the mongrels that proceed from a cock gold-finch and a female Canary-bird. The reason that inclines me to believe this, is, that in general the male has more influence than the female on the strength and quality of the different races. Besides, those mongrel birds which are stronger, which have a more piercing note, and a longer breath than Canaries of the pure kind, likewise live longer. But there is one constant observation which relates to both; and that is, the oftener they hatch, the more they abridge the period of their lives. A cock Canary-bird reared alone, and deprived of any intercourse with a hen, generally lives thirteen or fourteen years; a mongrel proceeding from the gold-finch in the same circumstances, will live eighteen or even nineteen years. A mongrel from the siskin will live fifteen or sixteen years;

years; while the cock Canary-bird, that has been accustomed to one or more females, lives only ten or eleven years, and the mongrel from the goldfinch, fourteen or fifteen years. It is necessary, moreover, to separate them from the females immediately after the hatching season, that is, from the month of August to March, otherwise their passion so exhausts them, that their lives are still shorter by two or three years.

In the inferior animals, as well as in man, even in our small birds, the diversity of character, or if you will, of moral qualities, often injures the consonance of physical qualities. If any thing could prove that the disposition is a good or bad impression given by nature, which education cannot alter, it would be the instance of our Canary-birds. Almost every one of them, says Mr. Hervieux, differs from another in disposition. There are some cocks that are always melancholy, and even sullen, singing seldom, and then in a dismal strain; they are long in learning what you teach them, and learn it at last but imperfectly, and very soon forget it. They are often so uncleanly, that their feet and tail are generally dirty; they do not please the female, whom they never regale with their song, even when

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her young first appear, though indeed these are seldom much better than their father. There are others so wicked that they kill the hen they are put to, and there is no other way of taming them than by giving them two females, who join for their common defence; and when they have once vanquished by force, they conquer afterwards by love. There are others so barbarous as to break and eat the eggs when the hen has laid them; or if this unnatural father allow her to hatch, the young are hardly excluded from the shell, when he seizes them with his bill, drags them from the nest, and kills them. Some are so wild, savage, and ungovernable, that they will allow themselves neither to be touched nor caressed; they must be left at liberty, and cannot be treated like the others: if they be meddled with in the least they will not breed; their eggs must not be touched or taken away; and they will not hatch if they be not suffered to pair and build as they please. Lastly, there are some of an indolent disposition; such, for example, are the grey ones; these never build, and the person that attends them must make a nest for them. All these tempers are very distinct and very different from that of our favourite Canary-birds, which are always gay,
always

always singing, tame, agreeable, good mates, attentive fathers, and of so gentle a disposition, and so happy a temper, that they are susceptible of every good impression, and endowed with the best inclinations: they incessantly charm the hen with their song; they soothe her in her distressful assiduity of hatching; they invite her to resign her place to them, and actually sit on the eggs several hours every day; they join with her in feeding the young; and lastly, they are docile, and learn whatever is taught them. It is by these alone that we must form an opinion of the species; and I have only mentioned the others, to demonstrate that the temper and disposition, even in animals, proceed from nature, and not from education.

But it may be observed, that this evil disposition, which makes them break their eggs and kill the nestlings, often proceeds from their temperament, and from the impetuosity of their love; it is to enjoy the female more fully and more frequently, that they drive her from the nest and destroy the tender objects of her affection. Accordingly, the best means of making these birds hatch, is not to separate them, or to put them in different cages. It is better to put them into a room well ex-

posed to the sun, and to the east, in winter; where there are many hens and few cocks: here they enjoy themselves more, and multiply better: when a hen sits, the cock finds him another mate, and does not disturb her. Besides, the cocks have many quarrels among themselves from jealousy; and when they see any one so ardent as to torment the female, and attempting to break the eggs, they beat him sufficiently to deaden his desires.

When they are about to build, you must furnish them with fine lint, the hair of cows, or stags, which has not been employed in other uses, with moss, and very small and dry straw. Goldfinches and siskins, if put with hen Canary-birds, when mule birds are wanted, prefer small straw and moss, but the Canary-birds like better to use the hair and lint: these must be cut very small, for fear the threads should entangle the feet of the hen, and cause her to pull the eggs from the nest as she rises from it.

In feeding them, you must place in the room a hopper, pierced all around, so as to admit their heads filled with a portion of the following composition: three pints of rape seed, two of oats, two of millet and of hemp-seed: every twelve or thirteen days the
hopper

hopper is to be filled, taking care that the seeds be clean and well winnowed. This food is proper as long they have nothing but eggs; but the evening before the young are to be excluded, they must have a dry cake kneaded without salt, which may be left till it is eaten up, and then you may give them eggs boiled hard; a single hard egg if there be but two cocks and two hens, two eggs if there be four cocks and eight hens, and so in proportion. They must have nothing green while they are breeding, which would weaken the young too much; but in order to vary their food a little, and cheer them with a new mess, give them every third day, on a plate, instead of the dry cake, a bit of white bread dipped in water and pressed with the hand; this bread not being so substantial a food as the cake, will prevent them from growing too fat when hatching: it will likewise be proper to give them at the same time some poppy seeds, but only once in two days, for fear of heating them too much: sugar biscuits generally produce this effect, which is followed with another still more hurtful; for when they are fed on biscuit, they often lay adule eggs, or bring weak and sickly young. While they have young, boil their rape-seed to deprive it of its acrimony.

acrimony. Long experience, says Father Bougot, has taught me that this food is that which best agrees with them, notwithstanding what all authors have said who have written expressly on the subject.

After the eggs are laid, give them plantain and lettuce seed to purge them, taking away however the young, for this food would weaken them, and must be given only for two days to the parent birds. When you wish to rear Canary-birds with the stick, you must not, according to the directions of most bird-breeders, leave them with the mother to the eleventh or twelfth day; it is better to take them away after the eighth day: take them away in the nest and leave nothing but the case. The food of the nestlings must be previously prepared; it is a paste composed of boiled rape-seed, a yelk of an egg, and crumb of the cake mixed and kneaded with a little water, which is to be given them every two hours. This paste must not be too liquid; and for fear of its growing sour, it must be renewed every day till the young can feed themselves.

The brood of birds in a state of captivity is not so constant, but is perhaps more numerous than it would be in a state of liberty; for
there

there are hens who will hatch four, and even five times a year, laying four, five, six, and sometimes seven eggs at a time; in general, they have three broods, and the moulting prevents their having more.* There are hens, however, that hatch while they moult, provided they begin to sit before that time. Birds of the same nest do not all begin to moult at the same time. The weakest are the first that undergo that change; the strongest are often a month later. The moulting of jonquil Canary-birds is more tedious, and generally more fatal than that of the others. The hens of these jonquil birds lay only three times with three eggs each time; the light-coloured ones both cock and hen, are too delicate, and their brood seldom prospers. The cream-coloured have some repugnance at pairing with one another; in a large aviary the male generally chooses one of a different colour. In general the white go through

* There are hens which do not lay at all, and which are called *bréhaignes*; others which lay only once or twice during the whole year, and even after having laid the first egg, remains till the next day, not laying the second till two or three days afterwards; there are others who only lay three times, which are, as it were, regulated, having three eggs at each laying, without any interval. There is a fourth species, which may be called *common*, because they are in great number; they lay four times, and each time four or five eggs.

through the whole process with perfect success; they pair, build and hatch as well, and better than any of the others, and the white spangled birds are likewise the strongest of all.

Notwithstanding these differences in the disposition, temperature, and fertility of these birds, the time of incubation is the same in all; they all sit thirteen days, and when it happens a day less or more, it appears to be owing to some accidental circumstance; cold retards the exclusion of the young, and heat accelerates it. Accordingly, it sometimes happens that the first sitting in April, lasts thirteen days and a half, or fourteen days, if the air be at that time cold; on the contrary, the third hatching, which happens during the great heats of July or August, lasts only twelve days, or twelve days and a half. The bad eggs ought to be separated from the good; but in order to know them certainly, you should wait till they have been sat upon for eight or nine days; then take each egg gently by the two ends for fear of breaking them, and hold them against the sun or a lighted candle: those that are clear must be rejected; it would only fatigue the hen to leave them with her. In thus detaching the clear eggs, we may sometimes of three nests only make two; and the third hen being at liberty will proceed again to lay. It is
a practice

a practice much recommended by bird-fanciers to take away the eggs as the hen lays them, substituting an ivory one in their place, that the whole may be hatched in one day. When the last egg is laid, the ivory ones are removed and the others replaced. In general the time of laying is in the morning, about six or seven o'clock; it is said that when this happens an hour later, it is owing to the hen's being sick; the eggs being thus laid in regular succession, it is easy to take them away the moment they are laid. However, this practice is more adapted to our own convenience than to that of the bird, and is contrary to the economy of nature; it makes the mother part with a great deal of heat unnecessarily, and burdens her at once with five or six young, which incommode her more than they give her pleasure; while, on the contrary, when she sees them come successively one after the other, her pleasures are multiplied, and her strength and courage supported; accordingly, very intelligent bird-fanciers have assured me, that the natural way has always succeeded better with them than the above-mentioned practice.

Indeed, I must say, that in general, the too subtle practices, and the scrupulous cares which our writers advise us to bestow on the

rearing of these birds, are more hurtful than useful; we must, as much as possible imitate Nature in every thing. In their native country, Canary-birds haunt the banks of little rivulets, or of moist ravines;* we must not, therefore, suffer them to want water, either to drink or bathe in. As they are natives of a very mild climate, we must defend them from the rigour of winter; but as they have been now long naturalised among us, they are accustomed to our cold weather, for we may keep them in a room without fire, and even with the window unglazed, guarded, however, with a net-work to prevent their escape. I have known many bird-fanciers who have assured me, that, by treating them thus hardily, they lose fewer than when they are kept in warm rooms. It is the same with regard to their food; it may be rendered more simple, and perhaps the birds will be the better for it. One circumstance it is particularly necessary to attend to, and that is, to beware of pairing them too soon in the season; in general, it is the custom to permit their union towards the 20th or 25th of March, whereas the 12th or 15th of April is a more proper time; for when they

* The canary-birds which are brought into England are born in the *barancos*, or the ravines, which the water forms in descending from the mountains.

they are put together while the weather is still cold, they grow indifferent to each other, and, if the hen happen to lay eggs, she leaves them if the weather do not grow warm; thus we lose a whole hatching by seeking to have it too early.

The young birds are different from the old ones, not only in colour, but in other qualities. A young Canary-bird of the year, observed on the 13th of September, 1772, says M. Gueneau, who communicated this intelligence to me, had the head, the neck, the back, and the quill-feathers blackish, except the four first feathers of the left wing, and the six first of the right wing, which were whitish; the rump, the coverts of the wings, the tail, which was not yet quite formed, and the under part of the body, were also of a whitish colour, and there were not as yet any feathers on the belly from the *sternum* to the *anus*. This young bird had its lower mandible entering within the upper, which was pretty thick, and a little hooked. As the bird advances in age, the disposition and shades of the colour change; the old are distinguished from the young birds by strength, colour, and song. The old ones have always the strongest and most vivid colours, their feet are rougher, inclining to black if they be of the grey race; and the nails are thicker and longer

than those of the young. The female sometimes so much resembles the male, that it is not easy to distinguish the difference at first sight; however, the colours of the male are always the brightest, the head a little thicker and longer, the temples more of an orange colour, and under the bill a flame-coloured yellow, which descends lower than in the female; his legs are also longer, and he begins to record almost as soon as he can feed himself. It is true, that there are hens which likewise begin thus early: but taking all these marks together, we shall be at no loss to distinguish, even before the first moulting, the cock from the hen. After that time there is no more uncertainty, for the cock declares himself by his song.

Every quick exertion of the voice is in animals a strong indication of passion: and as love of all internal motions, is that which agitates them oftenest, and transports them most powerfully, they do not fail to express its ardour. Birds by their song, the bull by its lowing, the horse by neighing, the bear by growling, all announce one and the same desire. The ardour of this desire is by no means so strong nor so conspicuous in the female as it is in the male, and accordingly she expresses it but seldom by her voice: that of the hen Canary-bird is nothing more than a gentle note of tender satisfaction,

satisfaction, a sign of consent which does not escape her till she has long listened to, and suffered herself to be won by the ardent prayer of the male, who exerts himself to inspire her with the same passion as he feels. But when her desires are once excited, they must be gratified, otherwise she often falls sick and dies.

It is seldom that Canary-birds brought up in a chamber, fall sick before hatching; sometimes a few cocks over eat themselves and die: if the hen grow sick while she is setting, her eggs must be taken away and given to another; for though she should get better soon, she will not return to her nest. The first system of sickness, especially in the cock, is melancholy; whenever he is observed to lose his natural gaiety, he must be put into a separate cage, and placed in the sun in the same room with the hen. If his feathers appear rough, you must look if he has not a pimple above the tail; when the supuration is fit to be opened, the bird often performs it himself with his bill; but if it goes on too slowly, it must be opened with a large needle, and the wound anointed with saliva, without mixing any salt with it, which would smart it too much. The next day you may let him loose, and you may know by his behaviour and eagerness for the hen, whether he be cured or not. If not, you must take him again, and with
a small

a small quill blow a little white wine under his wings, put him in the sun, and next day when you let him loose judge as before of the state of his health; if melancholy and disgust for the female continue after these remedies, all hope of cure is vain; he must be put into a separate cage, and another male given to the hen similar to the one she has lost, or if that cannot be, one of the same variety with herself. There is generally more sympathy between those which resemble each other; except in the case of cream-coloured varieties, which prefer the females of any other colour. Care, however, must be taken that the new male be not a novice, but already acquainted with the duties of a parent. When the female falls sick she must have the same treatment as the male.

The most general cause of sickness is too abundant, or too rich food; when these birds are made to breed in a cage or closet, they often eat too much, or select the succulent food designed for the young; hence the consequences are either repletion or inflammation. By keeping them in a room this inconvenience is in a great measure prevented; because being among a great number, they hinder one another from eating to excess. A cock who eats for a long time is sure to be beaten by the other males; and the same is the case with the hens; these

these quarrels give them exercise, temperance, and occupation from necessity; and hence it is chiefly owing that they are seldom or never sickly in a chamber during the breeding time; it is only after hatching that infirmities and diseases attack them. The greater part have then the pimple we mentioned above, and afterwards all of them are subject to moulting. Some support pretty well this change of state, and do not fail to sing a short while every day; but most of them lose their voice, and some even die. When the hens have attained the age of six or seven years, many of them die in moulting; the cocks support this species of disease more easily, and exist three or four years longer. However, as moulting is a natural effect rather than an accidental disease, these birds would have no need of remedies, or would find such for themselves had they been reared by their parents in a state of nature and liberty. But being under restraint, fed by us, and made more delicate, moulting, which to birds at freedom is only an indisposition, a less perfect state of health, becomes to those in captivity, a serious and often fatal malady, for which indeed there are but few remedies.* It remains only
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* A small piece of steel, (not iron, as some have mentioned) should be put into their water, and let it be changed

to say that moulting is the less dangerous, if it happen early, that is, in a good season of the year. Young Canary-birds moult in the first year, about six weeks after they are hatched; they become melancholy, appear rough, and put their head under the wing. Their down falls in this first moulting, and in the second, the following year, the large feathers, even those of the wings and tail, fall likewise. The young birds of the last brood, which have not been hatched till September, or later, suffer accordingly much more in moulting than those which were hatched in the spring. Cold weather is very unfriendly to this state, and they would all die were they not kept in a temperate, or rather warm place. While this function is going on, that is, for six weeks or two months, Nature labours to produce new feathers; and the organic molecules which had been previously employed in forming the seminal fluid, are now engaged in this new production; accordingly, when moulting, birds neither breed nor pair; for
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three times a week. Other remedies have been mentioned, but this is amongst the best. Steel is recommended in preference to iron, only for fear that the latter might be rusty.

the superflux of life is wanting, which every being must have before it can convey it to others.

The most fatal and the most common disease, especially to the young Canary birds, is that called the surfeit, in which their bowels seem to descend to the extremity of the body. The intestines are seen through the skin, in a state of inflammation, redness, and distention; the feathers on the part fall off; the bird grows emaciated, gives over eating, though he sits perpetually beside his meat, and dies in a few days. The cause of this disease is the too great quantity, or too succulent quality of the food. All medicines are fruitless; diet alone can save a few out of a number of birds thus affected. They must be put into separate cages, and nothing given to them but water and lettuce seed; this food is cooling and purgative, tempers the ardour which consumes them, and sometimes causes evacuations that save their lives. In fine, we may observe, that this disease proceeds solely from our method of rearing these birds, for it is seldom that those which are brought up by the parent birds are ever attacked with it. We ought, therefore, to be particularly cautious of over-feeding them when we bring them up with the stick: boiled rape seed, a little groundsel, without sugar or biscuit, and

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in general rather too little than too much food, is the most approved method.

When the Canary-bird utters a faint and frequent cry, which seems to issue from the bottom of his stomach, he is said to be asthmatic; he is also subject to a certain extinction of voice, especially after moulting. The asthma is cured by administering plantain-seed, and hard biscuit soaked in white wine; and the extinction of voice by good food, such as yolks of eggs, mixed with the crumb of bread; and for drink, a ptisan of liquorice, that is, water in which liquorice root has been steeped and boiled.

Canary-birds are frequently affected with ulcers in the mouth; these proceed likewise from too abundant, or too succulent food, which often produces inflammation in the throat and palate, and must be cured by cooling diet, such as lettuce-seed with water, in which some bruised melon-seeds have been put.

These birds are likewise infected with a sort lice and scab, owing to the slovenly manner in which they are kept. Therefore care should be taken to keep them always very clean, giving them water to bathe in: never putting them into cages of old wood, never covering these but with new cloth where there have been

been no moths, and sifting and washing the seeds and herbs given them for food. These little cares must be bestowed on them if we wish to have them neat and healthy; they would be so if they were in a state of liberty: but confined and ill tended, they are, like all prisoners, subject to the evils of captivity. Of all those we have mentioned, none seem to be natural except moulting. There are even some of those birds which, in this wretched state of captivity, are never sick, custom seeming to have made it to them a second nature. In general the fault of their temperament is excess of heat, and therefore they constantly need water. When wild, they are found near rivulets or waste places; bathing is necessary for them at all seasons; for if a plateful of snow be put in their cage, they will lie down in it and turn themselves upon it with signs of pleasure, even in time of the greatest colds; this fact proves sufficiently, that it is more noxious than useful to keep them in very warm places.

But there is another disease to which the Canary-bird, as well many other birds, are subject in confinement: I mean the epilepsy. The yellow Canary-birds are most liable to this falling sickness, which seizes them in a moment, even when they are singing the

loudest. It is said they ought not to be touched, or taken up when they fall, but that we ought merely to observe if they have voided a drop of blood at the bill, in which case they will come to themselves, and recover in a little space their sense and life ; that touching them before would make the drop fall too soon, and would occasion their death. I wish the truth of this account were well ascertained, for some facts in it appear to me doubtful. Thus much however, is certain, that when they survive the first fit, they often live as long after as if they had never been attacked by it, but I believe that they might all be cured by giving them a slight wound in the feet, for in this way parrots are often cured of the epilepsy.

How many evils attend upon slavery ! In a state of freedom would those birds be asthmatic, scabby, or epileptic ? Would they be liable to inflammations, to imposthumes, to ulcers ? And is not the most direful of all diseases, that arising from ungratified love, common to every being in captivity ? Females especially, being more deeply tender, more delicately susceptible, are more subject to it than males. It is remarked, that the hen Canary-bird often grows sickly at the beginning of spring, before she has got a mate ; she fades,
pines,

pires, and dies in a few days. The vain emotions and ungratified desires which then seize her suddenly, are the cause of her languor, when she hears so many males singing round her whom she cannot approach, the cock, though the cause of desire, and the most ardent in appearance, resists better than the female the evils of celibacy; he seldom dies of privation, but often of excess.

In other particulars the physical temperament of the hen Canary-bird is like that of the female of other birds. She can lay eggs without any communication with the male, but they are addle, and the heat of incubation corrupts instead of vivifying them*. It has been observed, that hens seldom lay eggs if they be totally sequestered, and neither hear nor see the male; but when they are excited by the sight of him, or by his song, they lay much more frequently; such effect have objects, even at a distance, on the powers of sentient beings.

Canary-birds are bred in large quantities, both for sale and amusement, in Germany,

* The egg itself is but a matrix, which the female throws out; this matrix remains unfruitful if it have not been previously impregnated by the male: and the heat of incubation therefore corrupts instead of vivifying.

France,

France, and England; and in each of those countries they have, by care, much improved the breed, beyond those now imported from the natural climate. They are of different colours, yellow, white, buff, grey, and green, with endless varieties of combination arising from the different shades of colour in the parent birds. Those brought from Germany are generally variegated, or mottled, and are the least valued, because the heat of the stoves, generally used to warm the houses in that country, renders the birds bred there tender and short-lived; German birds seldom living above a year or two in this country.

The cock of this kind is highly valued for its singing, having a very sweet note, which it continues for some time in one breath, without intermission, and raises it higher and higher by degrees, with great variety.

The fore part of the head, the throat, the pinion of the wing, and rump of the cock, are of a brighter yellow than in the hen; which marks will hold good, let them be of what kind they will: the cock is also bigger than the hen, and his carriage is also more sprightly and majestic; for he will often extend his neck and head in a very brisk lively manner. The hens do not sing, or so indifferently, it does not deserve

serve the name of singing. Whenever the cock sings, his throat may be observed to swell and play all the while he is warbling, whereas there is no such motion in the hen.

There are two particular sorts of Canary-birds known and esteemed among breeders, besides some varieties under each. These are those birds which are all yellow, and those which are mottled, with a yellow crown; the former, in the breeding stile, being called *gay* birds, and the latter spangled, or *fancy* birds. The fancy breed are esteemed the strongest, and have the boldest song. Careless breeders often match a gay with a fancy bird, and then the produce, partaking of both kinds, are called *mules*; being foul irregular birds, of no value for feather, though they may prove as good as any, merely for singing.

If you propose to breed gay birds, choose the cock and hen of a clear uniform yellow colour, without being spotted with foul feathers; for these foulnesses indicate that the breed has some time or other been crossed.

There are several subscription societies in London, which raise annual premiums for the finest birds, and who have a pattern bird beautifully engraved and coloured, as the standard
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of perfection, with his various characters explained in a technical stile underneath. The principal test of a good fancy bird is the having a clean cap ; that is, the crown of his head, defined by a horizontal line at the level of his eyes and beak, is to be of a clean yellow or white, without being broke, or spotted with foul feathers : and a single feather of this kind is a drawback from his perfection ; though this degree of perfection is seldom found. Add to this, that his back, wings, and tail, ought to be as clear from yellow or white feathers. The finer he is mottled on the back, and clearer yellow he is on the belly, the handsomer he will be esteemed.

These general characters are equally requisite in the hen as in the cock ; besides which, there is a casual variety in fancy birds, distinguished either as *mealies* or *junks* ; the meally birds being those whose crown and bellies are of a clean white or pale yellow ; and the junks, whose crown and bellies are of a deep yellow.

The fine spangled sort abovementioned, commonly called French Canary-birds, and the meally ones are the best to breed with, for those who are very curious ; because a spangled cock with a meally hen, will produce a more regular
spangled

spangled feather than if the cock and hen were both spangled, for then they would breed too high upon the yellow.

THE SISKIN, OR ABERDUVINE.

OF all granivorous birds, says Buffon, the goldfinch is supposed to be the most nearly allied to the siskin; both have the bill elongated and slender towards the point; the manners of both are gentle; they are both of a docile disposition, and their motions are brisk and lively. Some Naturalists, struck with these marks of resemblance, and the great analogy which subsists between these birds in other respects (for they pair and produce fertile offspring), have considered them as two proximate species of the same genus.

The siskin is smaller than the gold-finch, his bill is shorter in proportion, and his plumage quite different; he has black on his head, but no red; his throat is brown; the

fore part of the neck, the breast, and outward feathers of the tail are yellow, the belly white, with a yellow tinge; the upper part of the body of olive green, spotted with black, which becomes yellowish at the rump, and still more so on the feathers above the tail.

With regard to those internal qualities that more immediately depend on organization or instinct, the difference is still greater. The siskin has a song peculiar to itself, inferior to that of the gold-finch; it is fond of the seeds of the adder, which the latter will not touch, and it resigns to the gold-finch those of the thistle; it creeps along the branches, and suspends itself at their extremities like the tom-tit, so that it may be considered as an intermediate species between this latter and the gold-finch. Besides, it is a bird of passage, and in its emigrations flies very high; it is heard before it is seen: while the gold-finch continues stationary in our climates all the year round, and never flies very high. Lastly, these birds are never found to associate together voluntarily.

The siskin learns to draw water like the gold-finch; it has equal docility, and though less active, it has more liveliness and gaiety; in an aviary it is always the first awake, and also

also to record and set the example to others; but as it has no wish to hurt, it is itself unsuspecting, and falls easily into snares, gins, nets, &c. It is more easily tamed than any other bird when taken old; it is only necessary for this purpose to offer it better food in your hand than it has in its trough, and it will soon become as tame as the most familiar canary-bird: it may even be made to come and sit upon your hand at the sound of a small bell; for you have only to sound it regularly every time you give it meat, the mechanical effects of the association of ideas taking place even in animals. Although the siskin seems nice in the choice of its food, yet it eats a great deal, and the sensations which depend on luxurious feeding have great influence on it. This, however, is not its ruling passion, or at least it is subordinate to a more noble one: in an aviary it always chooses a friend from amongst its own species if it can find one; if not, from some other: it takes upon itself the charge of feeding this friend like its young, putting the food into the other's bill. It drinks as much as it eats, or at least it drinks very often, but seldom bathes; it has been observed, that it very seldom goes into the water, but stands

on the rim of the vessel, dipping its bill and breast, without much agitation, except perhaps in great heats.

It is said to build chiefly in mountain forests ; its nest is difficult to find ; so difficult, as to be a received opinion with the vulgar, that it has the art of rendering it invisible, by means of a certain stone : accordingly nobody has given any account of the nest or manner of laying of these birds ; though, if we would have an idea of their procedure in those operations which tend to the multiplication of the species, we have only to make them breed in a room, which they certainly would do ; though indeed the experiment has been several times tried unsuccessfully : but it is more common and more easy to cross the breed of this race with the Canary-birds, between whom there is a sympathy so marked, that if a cock-siskin be put into a place where there are many Canary-birds, he goes directly towards them, keeps as near them as possible, and they also court him with equal eagerness ; if a cock and hen siskin be let fly in the same room with a number of Canary-birds, these last will pair indifferently with the former, or with those of their
own

own species ; but the male siskin is sometimes left unprovided.

When a cock siskin has paired with a hen Canary-bird, he partakes in all her labours with zeal ; he assiduously helps her in bringing materials for the nest, and in using them, and never fails to feed her while she is sitting ; but notwithstanding this co-operation, it must be confessed that the greatest part of the eggs are clear. A union of dispositions is not sufficient to operate fecundation ; there needs likewise a certain conformity of temperament, in which respect the siskin is far below the female Canary-bird. The few mule birds that are the produce of this union resemble both father and mother.

In Germany, the migration of the siskins begins in October, or even earlier : at that time they feed on the seeds of the hop, to the great injury of the proprietors : the place they have stopt in is well known by the quantity of leaves with which the ground is strewed ; they entirely disappear in the month of December, and return in February. In France, they come at vintage time, and return when the leaves are in flower ; they are fondest of the flower of the apple tree.

In

In England they are seen on their passage as in other places, sometimes in great numbers, at other times in very small flocks. The great flights happen every third or fourth year, and then, such is the multitude, that some have supposed they were brought by the wind.

The song of the siskin is not disagreeable, but much inferior to that of the gold-finch, which, however, it acquires with ease. It would likewise appropriate that of the Canary-bird, of the linnet, &c. could it hear them at an early age.

According to Olina, this bird lives to ten years; it is however to be remembered that among birds the females live longer than the males; but siskins are little subject to diseases, except to inflammation of the intestines, when they have been fed on hemp-seed.

In the cock siskin the crown of the head is black, the upper part of the body of an olive colour, mottled with black; the rump has a tinge of yellow, the small covert feathers above the tail are quite yellow, the larger ones olive, terminated with ash colour; sometimes the throat is dun, and even black; the cheeks, the fore part of the neck, breast, and inferior covert feathers of the tail, are a fine citron yellow;
low;

low; the belly yellowish white, and so are the sides, but mottled with black; there are two transverse olive-coloured, or yellow streaks, on the wings, the quill feathers are blackish, bordered exteriorly with olive; the tail feathers are yellow, except the two middle ones, which are blackish, bordered with greenish olive; the edges of all are black; the bill is brown at the point, the rest is white, and the feet grey.

The head of the hen is not black, but greyish, and her throat is white.

The whole length is four inches three fourths; the bill five lines; wings from tip to tip seven inches two thirds, the tail twenty-one lines, somewhat forked, and projecting seven or eight lines beyond the wings.

THE CHAFFINCH.

THE Chaffinch is a stout, hardy, well-known bird, being common in almost every tree and hedge; he is about the size of the bull-finch, is very lavish of his song, and when brought

brought up from the nest, or branchers, will sing six or eight months in the year; though when wild, not above three months, and chiefly in breeding time. Some of these birds, when brought up under other good song-birds, prove valuable, but the greater part are not worth keeping.

It is a custom among the bird men, when they want to learn the chaffinch, linnet, &c. a song, to blind them when they are about three or four months old, which is done by putting out their eyes with a wire made almost red hot; because, as it is said, they will be more attentive, and learn the better; but it would be much better never to confine them in cages, than purchase their harmony by such barbarous usage: it may be that this produces the alleged fact, but the cruelty is a disgrace to the wretch who makes the experiment.

The cock of this kind may be easily distinguished from the hen; he has a great deal more white in his wing than the hen, particularly on his pinion; his breast is more red, and the feathers of the whole bird are of a higher and brighter colour than the hen's. In an old bird, the head of the cock is bluish; the back of a reddish brown, with a mixture of ash-colour, or green; the breast of a fine red, and the belly

belly white: the colours of the hen are not so bright and lively, her rump is green, the back not so brown, and the belly inclines to a dirty kind of green; the breast is also of a duller colour, more upon the grey.

They begin to build in April, and have young ones about the beginning of May. She builds near the top of a high hedge, or in the branches on the side of a tree: her nest is extremely pretty, and is only excelled by that of the gold-finch; the outside is green moss, small sticks, withered grass, horse and cow-hair, wool, feathers, &c. making an exceeding soft bed for her young, on which she lays four or five eggs of a whitish colour, spotted with a few large reddish brown spots, and some small specks and streaks at the largest end, of the same colour.

They may be taken at ten days old, and managed in the same manner as the gold-finch or linnet; they are hardy birds, that may easily be reared.

These birds are taken in great plenty with clap-nets in June and July, especially the young flight, called branchers; therefore it is hardly worth the trouble of bringing them up from the nest.

THE GREEN-FINCH, OR GREEN-LINNET.

THIS bird is rather larger than the Chaffinch, of a strong, hardy nature; it is frequently kept in cages, but has a very indifferent song; it is more valued for its learning to ring the bells in a cage contrived for that purpose; though some of them, if brought up from the nest, will learn to pipe, whistle, and imitate the song of other birds.

At the beginning of winter, and in hard weather, they gather in flocks, and may be taken with clap-nets in great numbers.

The head and back of the cock are green, the edges of the feathers greyish; and the middle of the back has something of a chestnut-colour, intermixed; the fore part of his head, neck, and breast, quite down to his belly and rump, are of a deep yellowish green; the lower belly inclining to whitish, the borders

ders of the outermost quill-feathers of the wings are of an elegant yellow, as are also the feathers along the ridge of the wing. The colours of the hen are not so bright and lively; and on the breast and back she has oblong, dusky spots; where the cock is of a fine yellow, her colours are of a dull green. The young cock birds, as soon as they are feathered, may be known from the hens, by the same brightness in their colours.

The green-bird has young ones about the middle of May. She builds in hedges, and makes a large nest, the outmost parts of which consists of hay, grass, stubble, &c. the middle of moss, the inmost, in which the eggs lie, of feathers, wool, hair, &c. She lays five or six eggs, of a very faint green colour, sprinkled with small reddish spots, especially at the blunt end. The bird, from the end of the bill to the end of the tail, is ten inches and a half; the bill is half an inch; and the tail two and a quarter. Its weight about sixteen drams.

The young ones may be taken at ten days old, and brought up with the same food and management as other birds of the finch kind; they are not very tender; only keep them clean, and there is no fear but they will

thrive. They have little, however, to render them worth keeping but the colours; the cock is as finely feathered as most birds; and in an aviary makes as pretty variety as the best of them.

They are subject to but few diseases; the moulting is the most material, and the bad effects of even that is commonly counteracted by a few blades of saffron, or a small piece of iron put into their water.

THE GROSSE-BEAK, OR HAW-FINCH.

THIS bird weighs about an ounce and three quarters, and from the tip of the bill to the end of the tail, is seven inches, and its breadth, when the wings are expanded, upwards of twelve. It has a hard broad bill, exceedingly thick at the base, the circumference of which is said to measure more than two inches; and is about three quarters of an inch long, terminating in a very sharp point. The eyes are ash-coloured or grey; the feathers at the base of the bill are orange-coloured, but black between the eyes; the rest of the head is of a rusty yellowish red, with a border of black feathers encompassing the lower mandible. The neck and upper part of the back, are more red, the middle of some of the feathers appearing pale, or whitish; the sides of the body, the breast, and rump, are of a cinereous red, the belly, and under parts of the tail, more pale and inclining to white.

Some

Some of the shafts of the quill-feathers are white, others red, with their tips of a fine shining purple, and blue; the whole wings beautifully interspersed with a variety of shades and colours.

The legs and feet are of a pale flesh colour, the claws pretty large and strong.

They frequent the woods and mountains during the summer season, both in Italy and Germany, and the plains and vallies in the winter; whence, in very hard seasons, they pass over into England. They feed upon the kernels of cherry stones, olives, the kernels of the hawthorn tree, holly berries, &c. which by the strength of their bills, they crack with very great ease.*

* This solitary, wild, silent, almost deaf, and unfruitful bird, has all its qualities more concentrated within itself, and is not subject to any of those varieties which almost all proceed from the superabundance of nature. The male and female are of the same size, and resemble each other very much.

THE VIRGINIA NIGHTINGALE; OR, RED
GROSSE-BEAK.

THE Virginia Nightingale nearly resembles the song-thrush in size; the bill is of a palish red or dusky colour, encompassed with a border of black feathers extending below the chin; the head pretty large, upon which there grows a large pyramidal tuft, or towering crest, of a bright scarlet, with which colour the neck, breast, and belly, are adorned; the back, and tips or points of the wings and tail, are more faint, and rather of a pale brownish colour.

This bird has many strange gesticulations when it views its image in a glass; it raises and lowers its crest, shakes its wings, and sets up its tail after the manner of the peacock, at the same time, making a hissing noise, and striking at the glass with its bill.

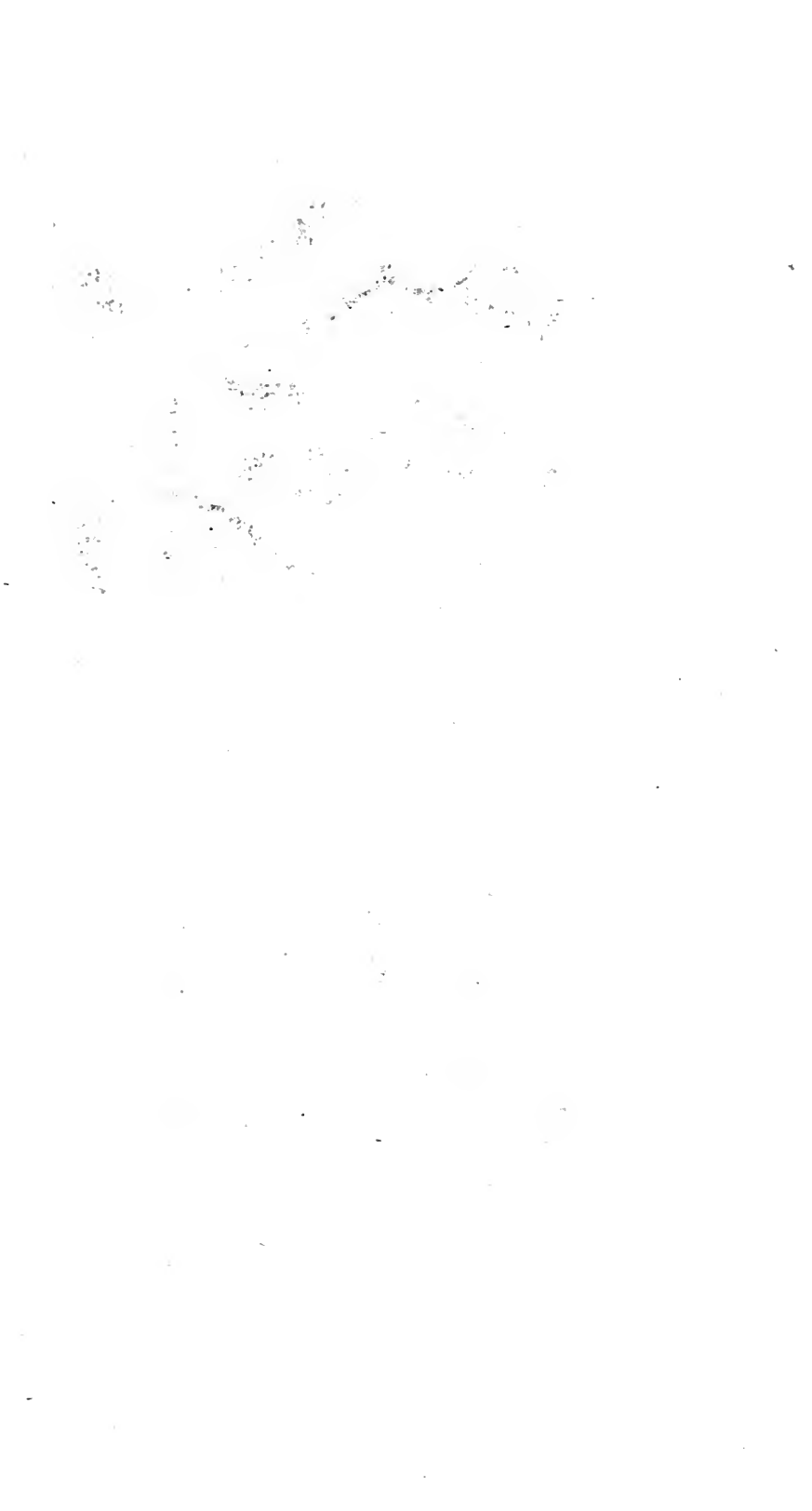
These, as well as the preceding tribe, have such an astonishing strength in their beaks,
that

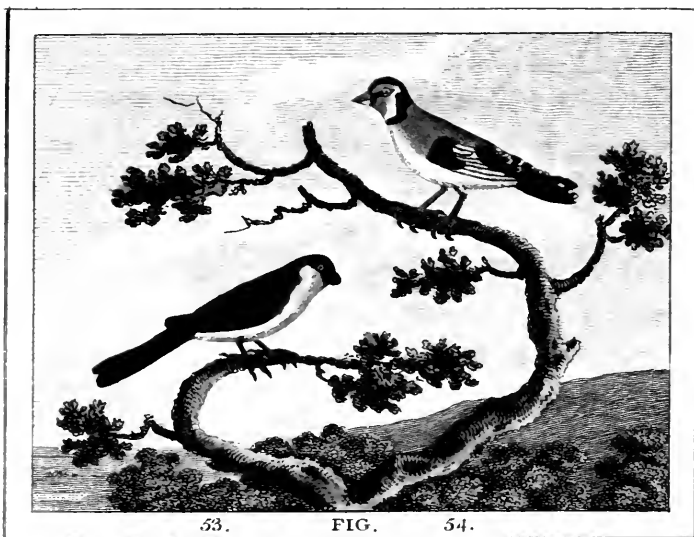
that they will break the stones of almonds, olives, peaches, cherries, and all other kinds of fruit, with the utmost ease and facility; and which they do for the purpose of getting at the kernels, of which they are very fond.

These birds are found chiefly in Virginia, New England, and several parts of North America, whence they are frequently brought over into England. They sing very agreeably, and some of their notes are much like those of the nightingale, whence it probably derived the name of the Virginia Nightingale.

The hen, as in all other birds, is not so beautiful in her colours as the cock, being more brown, with only a tincture of red; yet, when in cages, she sings as well as the cock, but her notes are not quite so loud. Both males and females having been transported into this country, many trials have been made to breed with them in a domestic state, but hitherto without any success, possibly from the climate not being congenial to their temperament, or from the proper method of treating them being unknown, as they are of a very docile and familiar disposition.

When in a cage they feed upon hemp and canary seeds, and will eat also the wood-lark's
and

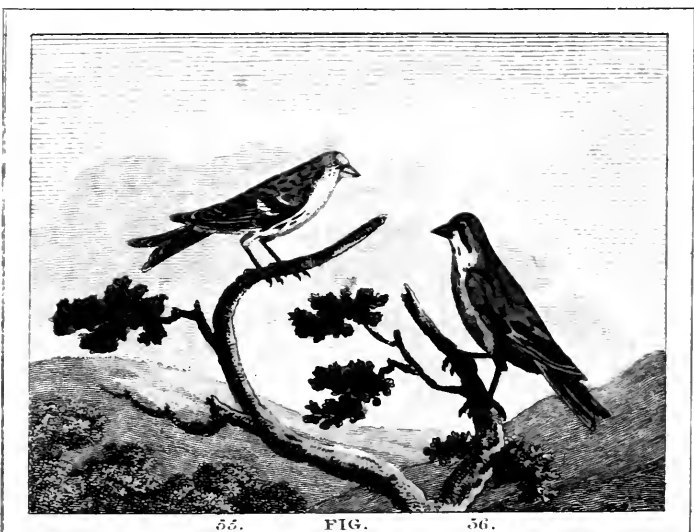




53.
Bullfinch.

FIG.

54.
Goldfinch.



55.
Linnet

FIG.

56.
Red Pole.

and nightingale's food. When they are sick, which seldom happens, a spider, or meal-worm, will relieve them.

THE BULL-FINCH.

THE Bull-Finch, when at full growth, measures from the point of the bill to the tip of the tail six inches, of which the tail is two; it weighs about thirteen drachms. They have a black short bill, very strong and crooked, the upper part hanging over the under, like that of a hawk; the tongue short, and the eyes of a hazel-colour; the head and neck larger in proportion to the body, than in the generality of small birds, from which, most probably, they derived their name. In some places they are called nopes, in others thick-bills, and in some hoops, most likely from their wild hooping sort of note.

They are very docile birds, and though possessing no song of their own, they will nearly imitate the sound of a pipe or whistle, and which talent the hen possesses as well as the

VOL. II. X cock.

cock. The peculiar excellence of these birds is, that they never forget what they have once learned, though they hang among ever so many birds; and it is positively asserted, that they may be taught to speak several words very distinctly.

It is a bird much esteemed in England for beauty and singing; in the former he equals most, and in the latter, when well taught, excels all other birds of his size.

They are, in many parts, very scarce, which seems to be occasioned by numbers of them being shot in the spring, on account of their destroying the early buds of the fruit trees; such as the apple, pear, peach, and other garden trees, of which they are exceedingly fond, and by that means, do great damage to the gardeners, who therefore seek to destroy them as the greatest pest to their labours. In some parts of England they are considered as such depredators as to have a reward placed upon their heads, and which, it is said, the churchwardens are obliged to pay for every bull-finch that is killed, so that this little animal is not only a mark for wantonness to exercise its cruelty upon, but is also pointed out as an enemy which man needs a reward to encounter. To this cause,
their

their being more scarce than any other of their tribe is perhaps to be attributed.

The cock is in bigness equal to the hen, but has a flatter crown, and excels her in the beauty of his colours; a lovely scarlet or crimson adorns his breast, the feathers on the crown of the head, and those that compass the bill, are of a brighter black than those of the hen, part of the neck, shoulders and back, are of a bluish ash-colour, shaded with red; the belly and rump white, some of the quill-feathers have their outward shafts red, and the inner of a fine glossy black; others have their exterior edges white, which make a sort of white line or cross bar upon each wing; the tail is of shining black, the legs of a dusky-colour, and the claws black. If both are seen together, the one may be very easily known from the other, the colours in the cock being much more resplendent than in the hen; but whilst these birds are young, it is more difficult to distinguish them; one of the surest ways is, to pull a few feathers from their breast, when they are about three weeks old, and in about ten or twelve days after, the feathers that come in their place will appear of a curious red, if a cock; and if a hen, they will come of a paleish brown.

The bull-finch breeds late in the spring, seldom having young ones before the end of May or beginning of June; she builds in orchards, woods, or parks, where there are plenty of trees; her nest is not very often found; it is an ordinary mean fabric, made with seemingly little art, on which she lays four or five eggs of a bluish colour, spotted at the biggest end, with large dark brown, and faint reddish spots.

These birds must not be taken too young; they should be at least twelve days old; at first they must be fed in the same manner as the young linnet, chaffinch, &c. with bread, milk, and rape-seed, made into a paste; and when grown up, with rape and canary-seed, three-fourths rape, and one fourth canary. They, as well as the starlings, require much pains to be taken with them in the early part of their education, and should never be fed without what they are wished to learn being repeated to them; they soon grow attentive, and generally by then they are three months old, will begin to record to themselves, after which a very few lessons will render them perfect.

The placing them in a dark room, or covering up their cages at these times, has frequently

quently been recommended, but is not at all necessary, as they will learn nearly in as short a space without taking that trouble, and repeat their lesson with more freedom, when they have acquired it, from being familiar with the presence of their tutor.

THE GOLD-FINCH.

THIS is something larger than the Canary-bird, is straight and handsome shaped, has a straight sharp ash-coloured bill, and the eyes of a hazel-colour. The length of a full grown bird, from the tip of the bill to the point of the tail, is five inches and a half, of which the latter is two, and the former little more than half an inch long; when in flesh it weighs about an ounce.

This bird is well known, and highly esteemed in every part of the kingdom, both for singing and the beauty of its colours; a ring of curious scarlet-coloured feathers encompasses

passes the forepart of his head, or basis of the bill, and from the eyes to the bill on each side is drawn a black line, the jaws or cheeks, white, the top of the head black, from which a broad black line is extended on both sides, almost to the neck; the hinder part of the head is white; the neck, and fore-part of the back, are of a reddish ash-colour; the rump, breast, and sides of the same, but a little paler; the belly whitish, the wings and tail black; only the tips of the principal feathers in both are white; besides, the wings are adorned with a most beautiful transverse stroke of yellow or gold colour.

They are of so mild and gentle a nature, that, after they are caught, without using any art or care, they will fall to their meat and drink: nor are they so affrighted at the presence of a man as most other birds are, nor very much troubled at their imprisonment in a cage; for after some little continuance therein, they become so familiar that though let loose, they will not go away, but if frightened, fly directly to their cage for shelter.

They are called in some places Draw-waters, from their aptness to learn to draw their water when they want to drink, in a little ivory bucket, fastened to a small chain,
made

made for that purpose; they will pull up their bucket, drink, and throw it down again; and many of them are taught to lift up the lid of a small box or bin, with their bill, to come at their meat, &c. They are wonderfully delighted with viewing themselves in a glass, fixed to the back of their bucket-board, where they will sit upon their perch, pruning and dressing themselves with the greatest care imaginable, often looking in the glass, and placing every feather in the nicest order; no capricious female can take greater pains, or be more particular in dressing herself, than this little bird is in rectifying all disorders in its plume, not suffering a feather to lay amiss.

The gold-finch is a long-lived bird, that will sometimes reach to the age of twenty years: Mr. Willoughby makes mention of one that lived twenty-three years. They fly in flocks, or companies; and when at liberty, delight to feed upon the seeds of thistle, teasel, hemp, dock, &c.

The feathers on the ridge of the wing in the cock are coal-black, quite up to the shoulder; while in the hen-bird, though they appear black, they are of a grey or dusky ash-colour, when

when compared to those of the cock; he is browner on the back and sides of the breast; the red, yellow, and, in short, all his colours are much brighter than those of the hen; these are constant, infallible marks, by which the cock may be known from the hen, either old or young.

The goldfinch begins to build in April, when the fruit trees are in blossom: as they excel all our small birds in beauty of feathers, so do they likewise in art: their nest is not only very small, but exceedingly pretty: the outside consists of very fine moss, curiously interwoven with other soft bedding; the inside lined with delicate fine down, wool, &c. The female lays six or seven white eggs, speckled and marked with a reddish brown. To find their nest is not very easy, for they generally build in fruit-trees, viz. apple, pear, plumb, &c. but most commonly in the apple, pretty high upon the branches, where either the blossom or leaves secure them from discovery, and at such a time when they cannot be got at without the hazard of damaging the bloom or young fruit. They sometimes build in the elder tree; and sometimes in thorns and hedges; but by no means so generally as in fruit trees.

The

The gold-finch has six or seven young ones at a breeding* ; they are tender birds, and therefore should not be taken before they are pretty well feathered ; and then their meat should be prepared in the following manner :—soak white bread in fair water, strain it, and then boil it with a little milk, till it is as thick as hasty pudding, adding to it a little flour of canary-seed ; with this meat feed them every two hours, or oftener, giving them but little at a time, two or three small bits only ; begin to feed them about sun-rising, and continue after this manner till sun-setting ; let them have fresh victuals every day, or every other day at farthest ; in about a month's time they may be brought by degrees to feed on canary-seed ; they will, it is true, feed on the hemp-seed, but it is not so good for them as the former.

If a young gold-finch be brought up under the canary-bird, the wood-lark, or any other fine singing-bird, he will take their song very readily.

This is a long-lived and very healthful bird, and is seldom out of order ; but if by
VOL. II. Y chance

* Belon says that they have generally eight ; but Buffon affirms that he never saw more than five eggs, in upwards of thirty nests, which he had an opportunity of examining.

chance they are found to droop, a little saffron in his water, or some chalk and gravel mixed together at the bottom of his cage, will be found to do him service ; thistle-seed, and other wild seeds which they feed on when at liberty, will also be found very beneficial.

These birds are taken almost at any time of the year, either with lime-twigs, or the clap-net ; but the best time for catching them is about Michaelmas. They frequent the fields where the thistle, and those other seeds grow, as mentioned before ; they are easily caught, being of so gentle and familiar a nature, and will both feed and sing almost immediately.*

* It is generally believed that the Goldfinches, which are caught in the county of Kent, have the best note. Goldfinches are subject to the epilepsy, and moulting is often fatal to them.

THE LINNET*.

THIS bird is universally known and admired in every place where he is found, chiefly for the melody of his voice; though Navaretti, in his account of China, takes notice of a similar bird, which he says the natives rear for the purpose of fighting after the manner of European game-cocks. The Linnet is in length, from the point of the bill to the end of the tail, five inches and a half long, and usually weighs about ten drachms.

For the sweetness of his singing, the linnet is so much esteemed, that, by many persons, he is thought to excel all small birds. He has certainly a curious fine note of his own, little inferior to the most celebrated birds, and may be taught likewise to pipe, whistle, or the song of any other bird; but as his own is so

Y 2

good;

* Nature herself, says Buffon, seems to have placed this bird immediately after the Canary, from numerous and striking analogies.

good, that trouble is unnecessary. He is, however, pretty apt in learning, and if brought up from the nest, will take the woodlark's or canary bird's song to perfection.

The cock bird of this kind may be known, either old or young, by these two marks; first, the feathers on his back are much browner than those of the hen; and secondly, the three or four longest feathers of the wing have a portion of white upon them; if it appear clear, bright, and broad, and reach up to the quills, it is a sure sign of a cock-bird: for the white in the wing of the hen is much less, fainter, and narrower.

They commonly build in a thick bush, or hedge, and sometimes among furze-bushes, &c. making a small, pretty nest, the outside of bents, dried weeds, and other stubble matter, and the bottom all matted together; the inside of fine soft wool, mixed with downy stuff, gathered from dried plants, with a few horse-hairs, made exceedingly neat and warm, on which she lays four, and sometimes five white eggs, with fine red specks, especially at the blunt end: and has young ones by the middle of April or beginning of May.

The young ones may be taken at ten days old, or sooner: it is highly necessary, however,

ever, that they should be kept very warm, clean, and fed at least once in every two hours. Their food at first should consist of rape-seed, soaked eight or ten hours in water, then scalded, and afterwards bruised, clearing it as much as possible from the hulls ; to this should be put twice as much white bread, that has first been soaked in water, and afterwards boiled in a little milk, mixing them together in a kind of soft paste, and which should be prepared fresh every day, as sour meat is very fatal to all kinds of birds ; when they begin to pick about their meat, and feed themselves, set scalded rape seed in their cage, to wean them from the bread and milk as soon as possible ; because sometimes feeding too long upon soft food will make them rotten. It will be a month or six weeks before they will be able to crack their seeds, and live entirely upon hard meat, such as rape and canary-seed, which is the best food they can have. When ill, they should be treated in the same manner as we have observed for other birds of the finch kind.

Linnets are easily taught to whistle, or to imitate other birds ; and when it is intended they should be thus instructed, they should have their lessons at the times they are fed, for
they

they will learn very much before they can crack hard seeds; or hang them under any bird whose song you wish them to learn; for these birds, when young, are exceedingly apt and will learn any song or tune.

Great numbers of these birds are taken with clap-nets, in June, July, and August, and likewise flight-birds about Michaelmas, in great plenty, by laying the nets near a small purling stream, where they come to drink; and as they soon become familiar, when thus caught, it is scarcely worth the trouble of bringing them up from the nest.*

* The female Linnets neither sing nor learn to sing; the males, if taken old, do not profit much by any lessons that are given them; those which are taken in the nest are the only ones capable of education.

THE RED-POLE; OR, RED-HEADED LINNET.

THIS bird is about the size of the common linnet; it is not a very fine bird for singing, but has a pretty chattering sort of song, though it cannot be called melodious.

The top of the head and breast of the cock is adorned with a remarkable shining red; the upper part of the body like the common linnet; the lower part of the belly inclining to a white; the prime feathers of the wings and tail dusky; the tail about two inches long, and somewhat forked; the utmost borders of the wing and tail feathers around are white; the legs and feet are dusky; the claws black and long for the bigness of the bird, but the legs very short.

In this kind, the hen also has a spot of red upon her head; but more faint than that of the cock, and of a saffron colour.

They

They build much in the manner of the common linnet; and feed upon canary, hemp, and rape-seed, the same as the linnet, goldfinch, &c. In general they frequent the sea-coasts more than the inland parts of the kingdom; and Mr. Albin is of opinion that they do not breed in this country, but leave us in the spring, having taken shelter here during the winter from more intense colds.

Willoughby has described several other kinds of linnets, which differ only in the shading of the colour of their feathers, as to their external appearance, some of them, especially of the tropical regions, having a very brilliant plumage; but many of them widely differ in the more general estimation, being entirely destitute of that harmony by which the common brown linnet renders himself a favourite.

THE TWITE.

THIS bird is, in colour and make, something like the linnet, but less; it is a very brisk and merry bird, and is always singing, therefore is frequently hung among other birds, to provoke them to sing.

The cock has a very short ash-coloured bill, the legs black, and has a curious red spot upon his rump, which the hen has not.

It is a bird not known to breed in this country; they visit some parts of England in the winter, and go away again in the spring; they are said to be very common in some parts of France, and are called there by a name which with us signifies the Lesser Linnet; and they say their eggs are like the eggs of that bird, but less.

The bird-catchers take them as they do linnets, &c. They feed upon canary and rape-seed. It is a pretty, familiar, gentle-natured bird, and by some reckoned well worth keeping.

THE BUNTING.

THE Common Bunting is about the size of the yellow-hammer. It is of a pale olive brown shaded with black, the feathers on the breast being somewhat lighter than those on the back and wings.

There are several varieties of this bird, but the most remarkable is the *snow-bunting*, which has the forehead and crown white, with some mixture of black; the rump, the outer feathers of the wings and tail white. In Scotland they are called snow-flakes, from their appearance in snowy weather; the more northward they are found, the whiter is their plumage.

THE WHEAT-EAR.

THIS bird weighs upwards of an ounce, and has a slender black bill, about half an inch long; the tongue is cloven or slit, and the inside of the mouth black, the eyes are of a hazel colour, above which there is a pale line passes towards the hinder part of the head; below the eyes there is a pretty large black one, which extends itself from the corners of the mouth to the ears.

The head and back appear of a cinereous colour, with a mixture of red resembling the colour of the gross-beak.

The rump in the generality of them is white, from whence by some it has the name of white-tail. The belly is white, faintly dashed with red; the breast and throat more deep, and of a stronger colour; both the covert and quill feathers of the wings are black, with their extreme edges white, tinged with a dusky red. The tail is something more

than two inches long, the middlemost feathers have their upper half white in some, and others their lower, with their tips and feathers likewise all white.

They feed on worms, beetles, and small insects, and breed in old forsaken coney burrows. They are very timorous and fearful of the hawk, and if but a dark cloud overshadow them, and intercept the rays of the sun, they will run into holes and hide themselves.

They are very numerous in many parts of England, particularly in the neighbourhood of Eastbourn, where, it is said, many hundreds are killed every year.

THE ORTOLAN.*

IT is somewhat less than the yellow-hammer. The plumage on the upper parts is brownish chesnut, mixed with black, the under parts are pale red. These birds are common in France and Italy, but are not found in England. They are caught in numbers to fatten for the table. This is done by putting them in a dark room, and feeding them with oats and millet. By this process they become so fat, that they would die from that cause alone were they not killed for sale. In this state they will sometimes weigh three ounces, and are accounted the most luxurious repast of the epicure, being, as it were, one lump of exquisite fat.

* This is an American bird, and is called by Fernandez *cocotzin*. They are to be found only in the hottest climates of America as far as Carolina. They live in troops on the mountains and rocks. Du Tertre, in his history of the Antilles, says, that the Ortolan is only a smaller species of turtle dove than what is found in Europe.

THE SWALLOW.

OF this tribe there are reckoned upwards of six and thirty distinct species, although there are not more than seven or eight of them known in these climates. At the head of this race we place the common-house-swallow, as the one with which we are best acquainted: this species in general measures about seven inches from the point of the bill to the end of the tail, and from the tip of the one wing to the tip of the other, when extended, seldom less than eleven or twelve, and commonly weighs from fourteen to fifteen drachms. They have a short black bill, but very broad at the base, so that they are enabled to open their mouths very wide; they have large eyes of a hazel colour; the head, neck, and upper parts of the body, are of a fine shining purplish blue, with an orange coloured spot above the bill, and another of the same colour underneath: the breast and belly

belly are of a dusky white, with a slight reddish shade; the covert feathers are of the same colour as the back and head, but the quill feathers are perfectly black; they have a pretty long tail, made up of twelve feathers, which is forked, the outermost feathers being pointed, and nearly an inch longer than the others; they are all black, except the two middlemost, with a white spot upon each, which spots make a beautiful line that crosses the tail, and is interrupted only by the two middle feathers.

They feed chiefly upon flies, gnats, and beetles, which they catch mostly, if not entirely, while they are upon the wing; and it is for this purpose that they are continually hovering over pools and standing waters, where the insects are numberless. They have an exceedingly sharp eye, and are so fleet and uncertain in their course, that it is no uncommon thing for a sportsman to declare war against and seek the constant destruction of these harmless animals, merely for the purpose of rendering himself a good shot.

It was a long time a matter of doubt among the most eminent naturalists, whether these birds went into a state of torpor during the winter, or emigrated into other countries; in
support

support of the former opinion, Dr. Fry used to relate, that he was told by a fisherman, who was accounted a man of veracity, that, being near some rocks on the coast of Cornwall, he saw, at a very low ebb, a black list of something adhering to the rock, which, when he came to examine, he found was a great number of swallows and swifts hanging by each other, in the same manner as is frequently observed in bees; they appeared perfectly lifeless, but recovered on being held in his hand, or put to the fire.

The account of the fisherman met with some sort of confirmation in that given by Dr. Colas to the Royal Society on the 12th of February, 1712-13, who, speaking of their mode of fishing in the northern parts, by breaking holes, and drawing their nets under the ice, said that he saw sixteen swallows so drawn out of the lake of Samrodt, and about thirty out of the King's great pond in Rosineilen; and that at Salebitten, he saw two swallows just come out of the water, that could scarcely stand, from being both very wet and very weak, and their wings hanging on the ground; and that he had often observed the swallows to
be

be very weak for some days after their appearance.

The ingenious Dr. Owen, speaking of woodcocks and fieldfares visiting us in the winter, and then returning northward, says, "But as
 " to cuckoos and swallows, 'tis generally allowed that they sleep in winter; having, as
 " it is said, been found in hollow trees and caverns; nor is this at all unlikely, though on
 " the other hand, I can see no absurdity in
 " supposing that these should go upon a summer as the others do upon a winter pilgrimage; that these pursue a lesser heat, as well
 " as the other fly from a greater cold."

Willoughby, however, is of a firm opinion, that the swallows emigrate from these climates in the winter,* and that they take their route into Egypt and Ethiopia, in which he is confirmed by most modern travellers; and we have it indeed corroborated in a very particular manner by a very respectable author, in speaking of the towns of Southwold, Ipswich, and

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others

* This idea is probably right. The testimonies of various travellers seem to support it. M. Adanson positively assured Buffon, that during a long residence which he made at Senegal, he had constantly seen the common house-swallow arrive at Senegal during the same season that they quitted France, and that they left the former country in the Spring.

others in the eastern parts of Great Britain, in the following words: “ In these towns, South-
“ would and Ipswich, in particular, and so at
“ all the towns on this coast, from Orford
“ Ness to Yarmouth, is the ordinary place
“ where our summer friends, the swallows,
“ first land when they come to visit us; and
“ here they may be said to begin their voyage
“ when they go back into warmer climates.
“ I was some years since at this place, about
“ the beginning of October; and lodging at
“ a house that looked into the church-yard, I
“ observed in the evening an unusual number
“ of swallows sitting on the leads of the
“ church, and covering the tops of several
“ houses round about. This led me to enquire
“ of a gentleman of the place, what could be
“ the meaning of such a multitude of swallows
“ having collected together, and sitting in that
“ manner?” ‘ O Sir, (replied he), you may
‘ easily perceive the reason; the wind is off
‘ the sea; for this is the season of the year,
‘ when the swallows, their food failing here,
‘ begin to leave us, and return to the country,
‘ wherever it be, from whence I suppose they
‘ came; and this being the nearest land to the
‘ opposite coast, and the wind being contrary,
‘ they are waiting for a gale, and may be said
‘ to

‘ to be wind-bound.’ “ And of the justness
“ of this remark I was convinced in the morn-
“ ing, when I found the wind had come about
“ to the north-west in the night, and there
“ was not a single swallow to be seen.

“ To me, however, it appears certain, that
“ swallows neither come hither merely for
“ warm weather, nor retire merely from cold ;
“ they, like shoals of fish in the sea, pursue
“ their prey; they are a voracious creature,
“ and feed flying; for their food is the insects,
“ of which in our summer evenings, in damp
“ and moist places, the air is full. They come
“ hither in the summer, because our air is
“ fuller of fogs and damps than in other coun-
“ tries, and for that reason breeds greater quan-
“ tities of insects. If the air be hot and dry,
“ the knats die of themselves; and even the
“ swallows will be found famished, and fall
“ down dead, when on the wing for want of
“ food. In the like manner, when the cold
“ weather comes in, the insects all die, and
“ then, of necessity, the swallows quit us, and
“ follow their food. This they do in going
“ off sometimes in vast flights like a cloud ;
“ and sometimes when the wind grows fair,
“ they go away a few at a time, not staying
“ at all upon the coast. This passing and re-

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“ passing

“ passing of the swallows is observed no
“ where so much as on this eastern coast,
“ namely, from above Harwich to the east
“ point of Norfolk, called Winterton Ness,
“ north, which is all right against Holland ;
“ the passage of the sea being, as I suppose,
“ too broad from Flamborough Head, and
“ the shore of Holderness, in Yorkshire,
“ &c.”

The *swift* is the largest of the kind known in these climates, being near eight inches long; and the extent of its wings eighteen inches; though it scarcely weighs an ounce. The whole plumage is a sooty black, except the throat, which is white. The legs are remarkably short, and consequently almost all its actions are performed on the wing. All its food is collected in this manner, consisting entirely of insects; and even the materials of its nest it collects either as they are carried about with the wind, or picks them up from the ground in its sweeping flight.

The *martin* is inferior in size to the common swallow, and its tail less forked. The head and upper parts of the body are of a glossy blue black; the breast and belly are white, as is also the rump, which may be considered as its distinctive character. It builds commonly under

der the eaves of houses, and sometimes against the sides of high cliffs over the sea.

The *sand martin* is the least of the swallow kind that visits Great Britain. The upper parts of the body are mouse-coloured; the breast and belly are white, with a mouse-coloured ring like a collar. To form its nest it bores some feet deep into a high sand-bank, where it deposits five or six white eggs. It has been said that the young of this bird are very fat, and in flavour scarcely inferior to the ortolan.

These birds are all known by their very large mouths, which, when they fly, are always kept open: they are not less remarkable for their short slender feet, which are scarcely able to support the weight of their bodies; their wings are of immoderate extent for their bulk; and their note is a slight twittering, which they seldom exert but upon the wing.

This peculiar conformation seems attended with a similar peculiarity of manners. Their food is insects, which they always pursue flying. For this reason, during fine weather, when the insects are most likely to be abroad, the swallows are for ever upon the wing, and seen pursuing their prey with amazing swiftness and agility. All smaller animals, in some measure,
find

find safety by winding and turning, when they endeavour to avoid the greater: the lark thus evades the pursuit of the hawk; and man the crocodile. In this manner, insects upon the wing endeavour to avoid the swallow; but this bird is admirably fitted by nature to pursue them through their shortest turnings. Besides a great length of wing, it is also provided with a long tail, which turns it in its most rapid motions; and thus, while it is possessed of the greatest swiftness, it is also possessed of the most extreme agility.

The nest of these birds is built with great industry and art; it is formed of mud from some neighbouring brook, well tempered with the bill; it is moistened with water for the better adhesion, and still farther kept firm, by long grass and fibres; it is lined within with goose feathers, which are not only the warmest but the neatest. The martin covers its nest at top, and has a door to enter at; the swallow leaves her's quite open. But our European nests are nothing in comparison with those the esculent swallow builds on the coasts of China and Comandel; and the description of which we shall give in the words of Willoughby. "On
" the sea-coast of the kingdom of China,"
says

says he, “a sort of party-coloured birds, of the
“ shape of swallows, gather a certain clammy
“ glutinous matter, perchance the spawn of
“ whales and other young fishes, of which they
“ build their nests, wherein they lay their eggs
“ and hatch their young. These nests the Chi-
“ nese pluck from the rocks, and bring them
“ in great numbers into the East-Indies to sell.
“ They are esteemed by gluttons, as great de-
“ licacies; who dissolving them in chicken, or
“ mutton-broth, are very fond of them: far be-
“ fore oysters, mushrooms, or other dainty
“ and liquorish morsels.”

At the latter end of September the swallow leaves us; and for a few days previously to their departure, assemble, in vast flocks, on house-tops, as if deliberating on the fatiguing journey that lies before them. It is indeed no slight undertaking, for their flight is directed to Congo, Senegal, and along the whole Morocco shore. There are some, however, left behind in this general expedition, that do not depart till eight or ten days after the rest. These are chiefly the latter weakly broods, which are not yet in a condition to set forth.

Those that migrate are first observed to arrive in Africa, according to M. Adanson;
about

about the beginning of October. It is supposed that they perform their fatiguing journey in the space of seven days. They are sometimes seen, when interrupted by contrary winds, wavering in their course far off at sea, and lighting upon whatever ship they find in their passage. They then seem spent with famine and fatigue, yet still they boldly venture, when refreshed by a few hours rest, to renew their flight, and continue the course which they had been steering before.

These are facts, says Goldsmith, which have been proved by incontestible authority; yet it is a doubt whether all swallows migrate in this manner, or whether there may not be some species of this animal that, though externally alike, are so internally different, as to be very differently affected by the approach of winter. We are assured, from many, and those not contemptible witnesses, that swallows hide themselves in holes under ground, joined close together, bill against bill, and feet against feet. Some inform us that they have seen them taken out of the water, and even from under the ice, in bunches, where they are asserted to pass the winter without motion; for besides those instances we have already related,

Rheumur,

Rheumur, who particularly interested himself in this enquiry, received several accounts of bundles of swallows being thus found in quarries and under the water. These men, therefore, have a right to some degree of belief; and are not to lose all credit, though in this instance they may be mistaken in what they aver.

All, however, that we have hitherto dissected, are formed internally like other birds: and seem to offer no observable variety. Indeed, that they do not hide themselves under water, has been pretty well proved, by the celebrated experiment of Frisch, who tied several threads dyed in water-colours, round the legs of a great number of swallows, that were preparing for their departure: these, he says, upon their return the ensuing summer, brought their threads back with them, no way damaged in their colour; which they most certainly would, if during the winter they had been steeped in water: yet still we must suspend our assent upon this subject, for Klein, the naturalist, has brought such a number of proofs, in defence of his opinion, that swallows are torpid in winter, as even the most incredulous must allow to have some degree of probability.

THE GOATSUCKER.

THIS bird, notwithstanding the difference of its size, seems to be nearly allied to the swallow, both in form and manners. Like the swallow, it is remarkable for the wideness of its gape; like it too, it feeds upon insects, and collects its food upon the wing; indeed, by some authors it has been termed the nocturnal swallow, for it preys entirely in the night, or rather in the dusk of the evening, when the other swallows are retired to rest.

There is only one species known in Europe, and this is considerably larger than the swallow, being ten inches and a half in length, and in weight two ounces and a half. The ground of the plumage is almost black, but it is beautifully diversified with ash-colour and white in different parts; and it has, like all the kind, a number of bristles about the bill. It is a great destroyer of cock-chafers and beetles; and its note resembles the
noise

noise of a spinning-wheel. From its nocturnal habits it has been called the night-hawk and the chum-owl. It is distinguished from the swallows by not having a forked tail. It visits England about May, and returns in August. There appears to be no other ground for the ridiculous story of its sucking the goats, than the width of its mouth, which is to be accounted for on much more rational principles. It makes no nest, but lays its eggs on the bare ground, or some loose crag, without any seeming care whatever.

There are sixteen foreign species of this bird enumerated, one of which is called the Grand Goatsucker, and is the size of a small buzzard: it inhabits Cayenne.

THE SPARROW.

TRIFLING as these birds appear, from the amazing familiarity with which they associate, we had almost said, in the habitations of man, they were formerly considered as a stock of sufficient importance to give name to that genus of small birds which we have been describing. Of late, however, like all things

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common,

common, they have not only been treated with indifference, but almost with contempt, for most modern naturalists have concluded, that they did them sufficient honour by retaining the name of the sparrow in their catalogues, without giving the smallest description of their persons. They are said to have no particular claim to notice, either from any peculiar beauty in their plumage, or from possessing any melody of song, having only a loud chirrup, which is more unharmonious than agreeable. The first of these positions we do not admit, as the feathers of some of them may claim a preference to others who are held in high estimation, as a proof of which we shall refer to the following descriptions:—as to the second charge, we have the authority of the ingenious Daines Barrington, to conclude it unfounded, and that its not having any song, is to be attributed to the want of tuition in the nest; for he, in his Letter to the Royal Society, on the singing of birds, having insisted that birds have not any innate ideas of the notes which are supposed to be peculiar to each species, says, “ Every one knows that the common “ house-sparrow, when in a wild state, never “ does any thing but chirp; this, however, “ does not arise from want of powers in this “ bird

“bird to imitate others, but because he only
“attends to the parental note. But to prove
“this decisively, I took a common sparrow
“from the nest when it was fledged, and edu-
“cated him under a linnet; the bird, how-
“ever, by accident, heard a goldfinch also,
“and his song was therefore a mixture of
“the linnet and goldfinch.” This is of it-
self sufficient to prove the talent and capacity
of the sparrow, and which has frequently
been confirmed by nestlings being put under
Canary-birds, almost as soon as hatched, and
when thus brought up, having sung nearly as
well as their foster-parents.

These birds are exceedingly prolific, having
from four to six in a brood, and the one we
are now treating of is supposed to have two,
and sometimes three broods in a season; a fe-
cundity which, possibly, may in some mea-
sure, be attributed to the plentiful supply of
food they are enabled to procure from fre-
quentering farm-yards, &c. They breed in
almost any hole they meet with, whether in
trees or houses, but are most partial to those
that they find in the roofs of barns, but which
are their haunts of least safety, for they there
become the frequent and easy prey of rats,
ferrets, &c. They sometimes feed on worms
and insects, but their chief food is all kinds
of

of grain, in search of which they do considerable mischief to the corn-field in the summer, and to the stacks in the winter.

The sparrow's bill is very thick, and about half an inch long; the eyes are of a hazel colour, the head of a dusky ash-colour, with two small white spots above the eyes, and a broad brown line passing from them; the back and rump are of a dusky ash-colour, shaded with green. The feathers on the outside of the shafts that divide the neck from the back are red, and black on the inside, but grow more pale towards the bottom. The wings are of a dusky colour, with some of their edges red, and a white line running across them; others have their middle parts black. The throat has a very large black spot upon it, some parts of it of a whitish ash-colour, with a long white spot under each ear; the belly, and lower part of the breast are whitish. The tail is about two inches long, the feathers of a dusky black, with reddish edges, the legs and feet of a pale brown, and the claws black.*

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* There are in Lorraine some black sparrows; but it is thought that they are only the common sparrow, which, living constantly in the halls of the glass-houses, (which are very numerous at the foot of the mountains) have become

The cock is distinguished from the hen by the black spot under the throat, and the white lines crossing the wing, those of the hen being of a dusky brown, and none of its colours so lively and fair as those of the cock.

These birds are extremely salacious, and are very short-lived. The cocks are remarkably bold and courageous; they will sometimes keep upon the ground with a degree of impudent confidence, and suffer themselves to be approached within a very few yards before they take wing, and even then they will pitch again at a small distance with the same effrontery.

The *Chinese sparrow* is not so large as the common sparrow before described; it has a short thick ash-coloured bill: there is a remarkable difference in the colour of the cock and the hen; the head, neck, breast, and belly, of the former being quite black, and the rest of the body, with the wings and tail, of a sort of chesnut colour, or rusty brown. The upper parts of the body of the hen are not by any means so bright as those of the cock,
being

come smoaked; for Lottinger being in one of these glass-houses, saw a troop of common sparrows, all of which were more or less black: an old man belonging to the place told him, that they become sometimes so disfigured, as not to be recognised.

being much more brown and dusky; the lower part of the breast and belly is more pale, inclining to a light brown, or hair colour; with beautiful regular spots of black and white upon the sides of the belly, and underneath the wings; the legs and feet of the same bright colour, inclining to a yellow; and those of the cock more dark and dusky.

They are said by travellers, to be very mischievous birds, and that at some particular seasons of the year they do a great deal of damage to the country people.

The *Bengal sparrow* is something larger than the common house sparrow; the bill is of a light horn colour, sharp pointed, and pretty large; the top of the head is of a fine light yellow, with an orange coloured shade; the neck, the sides of the wings, and upper parts of the body, are of a dusky brown, with the edges of the feathers more pale and light, and a broad pale stripe passing round the breast. The belly is considerably paler, with a yellowish gloss or tincture upon it. The hen appears darker than the cock, the stripes upon the breast being a good deal narrower. The legs and feet are of an orange colour, and the claws more brown.

Father Morella, in his description of Congo, says, “ The sparrows there, in time of rain,
“ change

change their colour to red, though they afterwards return to what they were before, which he says is usual with other sorts of fowls."

Father Cavazzi, in his historical description, says, "there's a little bird in Congo, not much unlike a sparrow, which at first sight seems wholly black, but upon a nearer view may be discovered to be a kind of blue; which, as soon as day breaks, sets up his note and sings; but the excellence of his song is, that it harmoniously, and almost articulately, pronounces the name of Jesus Christ; which repeated by many of them in concert, (says the father) is a heavenly music, worthy our special observation, seeing those heathen nations are excited to own the true God by irrational creatures."

There's a story likewise of another of these missionary gentlemen; Father Coprani, that in some degree resembles the former. In the same part of the country, he mentions a bird whose song consists of these plain words, *Va dritto*, that is, *go right*.

These stories we have repeated from the good fathers above mentioned, but must leave the credit of them to the judgment and faith of our readers.

The *Cape sparrow* is less than the former, nor is its bill, which is of a palish brown colour, quite so thick and strong as in the generality of the birds of this kind. The colour of the eyes pretty nearly resembles those of the mountain sparrow. The upper part of the body, with the head and neck, are black, which colour ends in a point upon the belly, the lower part of which, together with the thighs, and round the fore part of the wings is white.

The sides of the wings are of a light brown, the edges of some of the quill-feathers black. The colour of the tail is the same as the wings. The legs and feet are of a dusky brown.

Its note is said to resemble that of a whistling wind; they are found chiefly about the Cape of Good Hope, and some of the Dutch settlements there.

The *Mountain sparrow* is about the size of the common house sparrow, the body something longer, the bill thick and strong, of an ash colour, the circles of the eyes of a yellowish white, the pupils black. The upper part of the head, the sides, and upper part of the throat are of a dusky brown, beautifully mottled

tled with black and white, with a line of more dusky colour encircling the hinder part of the head, and a broad white one passing from the under chop, and bending downwards. The back is of a rusty coloured brown, with a few black stripes upon it, the wings not striped, but of a deeper colour, and more inclining to red, with the edges of some of the covert feathers white. The tail is of a dark colour, sprinkled with small round spots of white.

They are found in mountainous woody places, but are not very common.

The *Red-headed sparrow* is nearly as large as the common sparrow, but of a more slender shape in its body, it has a short ash-coloured bill, with a yellowish cast towards the base; the top, and back part of the head are both red, the sides white, with a black spot underneath each eye, in the form of a half circle; the outside feathers on the throat black, and a fine ring of white passing almost round the neck. The scapular feathers of the wings, and upper part of the back are of a reddish, or rusty coloured brown, a considerable part of them covered with black strokes, or marks, and some of the ends of the covert feathers

tipped with white ; which occasions two cross lines of white upon each wing ; the quill-feathers have not any spots or marks upon them, and are of a more light brown colour. The belly and breast are of a sort of dusky coloured white. The tail is of a dusky brown, with some of the edges more light. The legs and feet are yellow, the claws black.

THE AMERICAN MOCK BIRD.

IT is universally admitted by all travellers, that the harmony of the European groves far excels what is to be heard in those of any other part of the globe ; and Thomson not unaptly considers this superior talent for melody in the European birds, to be a sort of compensation for their great inferiority in point of gaudy plumage ; and which plumage has been thus most emphatically alluded to :

“ Words could not afford variety enough to describe all the beautiful tints that adorn some of them. The brilliant green of the emerald, the flaming red of the ruby, the purple of the amethyst, or the bright blue of the sapphire, could not, by the most artificial combination, shew any thing so truly lively or delightful to the sight, as the feathers of the chilcoqui or the tautotol.” To these might be added, a long list of others, equally beautiful, which inhabit the forests of America,

America, and those of the tropical regions; such as the curucui, barbets, jacamar, the tody, &c. But as little instruction can be obtained from an account of feathers, which it would be impossible to describe, we shall not, in this place, make the attempt, or give the list of them, but confine ourselves to one of the species, namely, the American Mock Bird, who has certainly some claim to that distinction from the superiority of his oracular endowments. It must, however, be admitted, that foreign birds, when brought to Europe, are, in general, necessarily heard to great disadvantage, as many of them, from their tameness, have certainly been brought up by hand, which is fatal to their songs, from the want of parental tuition; and besides which, it is very difficult to bring over the soft-billed birds, who are the most melodious, because fresh meat, and the hearts of animals, are the only substitute that can be given them for insects, which are their common food.

The mocking-bird has a plain appearance to the eye, and is about the size of a thrush, of a uniform grey colour, and a reddish bill. It is possessed not only of its own natural notes, which are musical and solemn, but it can assume the tone of every other animal in
the

the wood, from the wolf to the raven. It seems even to sport itself in leading them astray. It will at one time allure the lesser birds with the call of their males, and then terrify them, when they have come near, with the screams of the eagle. The mock-bird, however, pleases most, when it is most itself. At those times it usually frequents the houses of the American planters; and, sitting all night on the chimney top, pours forth the sweetest and the most various notes of any bird whatever. It would seem, if accounts be true, that the deficiency of most other song-birds in that country is made up by this bird alone. They often build their nests in the fruit-trees about houses, and are easily rendered domestic.

With regard to the original notes, however, of this bird, we are still in a state of uncertainty, as they can only be known by those who are accurately acquainted with the song of the other American birds.

Kalm, indeed, informs us, that the natural song is excellent; but that traveller seems not to have been long enough in America to have distinguished what were the genuine notes: with us, mimics do not often succeed but in imitations.

There

There is little doubt, however, that this bird would be fully equal to the song of the nightingale in its whole compass; but then, from the attention which the mocker pays to any sort of disagreeable noises, these capital notes would be always debased by a bad mixture.*

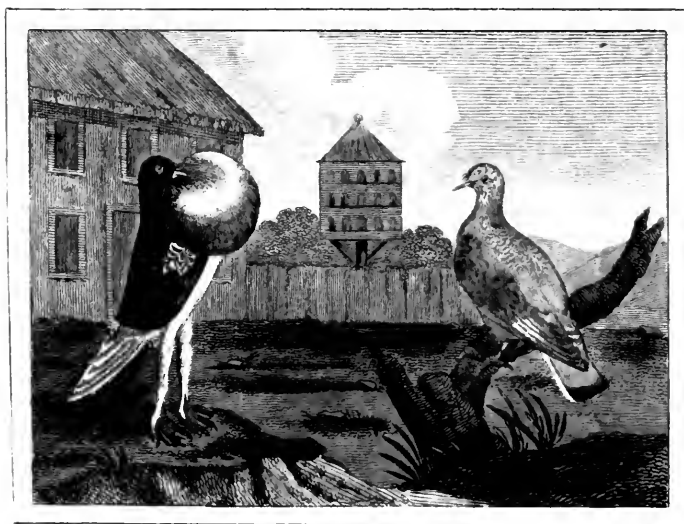
* Viellot communicated the following particulars to Soncini, respecting this bird :

It seems that the different positions and passions of this bird have all their peculiar song. Is it tranquil, and without fear? Its song is weak, and even languishing; if he fall to the ground a rapid trilling is heard at the same moment; if it rise, its throat seems to follow in gradation the motion of its wings. Is it uneasy? its song is short and interrupted. Is it angry? its voice is the same. Can it not remove you from its nest? it has a plaintive tone, and when you depart it displays all the beauty of its voice, and exerts it in its greatest extent. To these brilliant qualities of song, it adds that of being in song almost all the year, and of loving man, whose sight alone is sufficient to make it sing; hence it is, in the environs of inhabited places that it fixes its abode. Its song has obtained it the name of the Nightingale, in St. Domingo: but it has, in fact, neither its melody nor its sweetness; its voice is much stronger, and is not agreeable in an apartment. He begins to sing about an hour before sun rise, and continues a few moments after its setting; but it does not sing in the night like the Nightingale, not even during its amours. It moves its tail up and down, and carries it often erect; then its wings are pendant. It is bold and courageous; it fights with the small species of birds of prey, and chases them from the tree which they may have chosen. It lives upon insects, bay-berries, and the seeds of pimento.





Little Dove or Rock Pigeon.



Pouter,

Dove house Pigeon .

THE PIGEON,

THE Pigeon, from its great fecundity, has tempted man to endeavour to reclaim it from a state of nature, and teach it to live in habits of dependence; and in which he has in some measure been successful. Its fecundity indeed seems to be increased by human assiduity, since those pigeons that live in a wild state, in the woods, are by no means so fruitful as those in our pigeon-houses. The power of increase in most birds depends on the quality and quantity of their food; and it is seen, in more than one instance, that man, by a judicious alteration of diet, supplying food in plenty, and allowing the animal at the same time a proper share of freedom, has brought some of those kinds which commonly lay but once a year, to become much more prolific.

All the beautiful varieties of the tame pigeon derive their origin from one species, the *stock-*
VOL. II. D d *dove*;

dove; the English name, implying its being the stock or stem whence the other domestic kinds have been propagated. This bird, in its natural state, is of a deep bluish ash colour; the breast dashed with a fine changeable green and purple; the sides of the neck of a reddish gold colour; its wings marked with two black bars, one on the quill feathers, and the other on the covert; the back white, and the tail barred near the end with black. These are the colours of the pigeon in a state of nature; and from these simple tints man has by art propagated a variety that words cannot describe, nor even fancy conceive. Nature, however, still perseveres in her great outline; and though the form, colour, and even the fecundity of these birds may be altered by art, yet their natural manners and inclinations continue invariable, and undergo no change by any experiments made on them.

The stock-dove, in its native freedom, differs from the ring-dove, a bird which some naturalists suppose has never been reclaimed, from its breeding in the holes of rocks and the hollows of trees. All other birds of the pigeon-kind build, like rooks, in the topmost branches of the forest, and chuse their habitation as remote

mote as possible from man. But this species is soon induced to build in artificial cavities; and from the temptation of a ready provision and a numerous society, easily submits to the tyranny of man. Still, however, it preserves its native colour for several generations, and becomes more variegated only in proportion as it removes from the original simplicity of its colouring in the woods.

The varieties of the tame pigeon are so numerous, that it would be a fruitless attempt to describe them all: for human art has so much altered the colour and figure of this bird, that by pairing a male and female of different sorts, they can be bred almost to a feather. Hence we have the various names expressive of their several properties, such as carriers, tumblers, pouters, horsemen, croppers, jacobines, owls, nuns, runts, turbits, barbs, helmets, trumpeters, dragoons, finnikins, &c. all birds that at first might have varied from the stock-dove; and by having these varieties still improved by pairing, food, and climate, the different species have been propagated.

But there are several species of the wild pigeon, which bear a near affinity to the stock-dove, yet differ sufficiently from it to require a

D d 2

distinct

distinct description. Of this species is the *ring-dove*, a pigeon much larger than the former, and distinguishable in general from all others by its size. Many attempts have been made to render it domestic, by setting their eggs under the tame pigeon in dove-houses; but as soon as they could fly, they always returned to their state of nature. On the first appearance of winter, they assemble in large flocks in the woods, and leave off cooing, which note of courtship they do not resume till the commencement of spring, which renews their desires, by supplying them with food, and which they continue to practise till the approach of the ensuing winter. Some of this species weigh near sixteen ounces, and measure from the point of the bill to the end of the tail twelve inches, and from the tip of one wing to that of the other, when extended, near two feet. The head, back, and coverts of the wings, are of a bluish ash-colour; the under side of the neck and breast of a red purple mixed with ash colour; round the neck near the back part of the head is a semi-circular line of white; hence the name of ring; above and beneath that the feathers are bright and glossy, and of changeable colours as opposed to the light. The belly is of a light
straw

straw colour, the large quill feathers are dusky, and the rest of an ash colour, except the bastard wing, underneath which is a white stroke pointing downwards.

The *turtle-dove* is a smaller bird, and much more shy than any of the pigeon kind; it frequents the west of England during the summer months, breeding in thick woods, generally of oak. It is easily known from the rest by the iris of the eye, which is of a bright yellow, and a circle that surrounds the eyelids, which is of a beautiful crimson colour. The top of the head is ash-coloured, interspersed with olive, the forehead white: there is a spot of black feathers on each side the neck curiously tipped with white; the back is ash-coloured, with a tincture of olive brown; the scapulars and coverts of a reddish brown, spotted with black; the quill feathers of a dusky brown, the breast of a light purplish red; the extremity of each feather is yellow; the sides and inner coverts of the wings are bluish, and the belly white. The length of the tail is three inches and a half, has two feathers in the middle of a dusky brown; the rest are black delicately tipped with white; the end and exterior side of the outward feathers are wholly white.

The

The fidelity and constancy of these birds is proverbial; and it is said, that if a pair be put in a cage, and one dies, the other seldom long survives. It is a bird of passage, and does not stay in our northern climates during winter. They come over here in large flocks in the summer to breed, and though they delight in open mountainous and sandy countries, yet they build their nests in the middle of the thickest woods, choosing the most unfrequented places for incubation. They feed upon all sorts of grain, but the millet-seed is their favourite repast. The turtle-dove commonly measures twelve inches and a half in length, from the tip of the bill to the end of the tail; and when the wings are extended, the breadth is twenty-one inches. Some naturalists affirm; that this bird lays its eggs twice a year, and, if this assertion may be depended on, which is very probable, as it is a bird of passage, it is once when it visits us in summer, and once when it migrates to some warmer climate in winter.

The turtle-dove is the symbol of fidelity and constancy between husband and wife, between friends, between subjects and prince, and between armies and their generals. On the reverse of a medal of Heliogabalus, a woman is
seen

seen sitting, holding in one hand a turtle-dove, with this inscription, *Fides exercitus*. This symbol takes its rise from the male and female usually flying together, and the latter pining when she has lost her mate.

The *dove-house* pigeon breeds every month : but when the weather is severe, and the fields covered with snow, it must be supplied with food. At other times it may be left to itself ; and it generally repays the owner for his protection. The pigeon lays two white eggs, which produce young ones of different sexes. When the eggs are laid, the female sits fifteen days, not including the three days she is employed in laying, and is relieved at intervals by the male. The turns are generally pretty regular. The female usually sits from about three or four in the evening till nine the next morning, at which time the male supplies her place, and continues on the nest from nine till three, while she is seeking refreshment abroad. Thus they sit alternately till the young are hatched. If the female do not return at the expected time, the male seeks her, and drives her to the nest ; and, should he in his turn be neglectful, she retaliates with equal severity. When the young ones are hatched, they only
require

require warmth for the first three days; a task which the female takes entirely upon herself, and never leaves them except for a few minutes to take a little food. After this they are fed for about ten days with what the old ones have picked up in the fields, and kept treasured in their crops, whence they satisfy the craving appetites of the young ones, who receive it very greedily.

As this method of feeding the young from the crop is different in birds of the pigeon-kind from all others, we have been induced to give the following explanation. “ Of all
“ birds, for its size, the pigeon has the largest
“ crop, which is also made in a manner quite
“ peculiar to the kind. In two of these that
“ were dissected by a member of the Royal
“ Academy of Sciences, it was found that if
“ the anatomist blew air into the wind-pipe, it
“ distended the crop or gullet to a prodigious
“ size. This was the more extraordinary, as
“ there seemed to be no communication what-
“ ever between these two receptacles; as the
“ conduit by which we breathe, as every one
“ knows, leads to a very different receptacle
“ from that where we put our food. By what
“ apertures the air blown into the lungs of the
“ pigeon

“ pigeon makes its way into the crop, is un-
“ known; but nothing is more certain than
“ that these birds have a power of filling the
“ crop with air; and some of them, which
“ are called croppers, distend it in such a
“ manner, that the bird’s breast seems bigger
“ than its body. The peculiar mechanism of
“ this part is not well known; but the neces-
“ sity for it in these animals is pretty obvious.
“ The pigeon, as we all know, lives entirely
“ upon grain and water: these are mixed to-
“ gether in the crop; and in the ordinary way
“ are digested in proportion as the bird lays in
“ its provision. But to feed its young, which
“ are very voracious, it is necessary to lay in a
“ store greater than ordinary, and to give the
“ food a kind of half maceration to suit their
“ tender appetites. The heat of the bird’s
“ body, assisted by air and numerous glands
“ separating a milky fluid, are the most neces-
“ sary instruments for this operation; but, in
“ proportion as the food macerates, it begins
“ to swell also; and the crop must of conse-
“ quence be considerably dilated. Still, how-
“ ever, the air which is contained in it gives
“ the bird a power of contracting it at plea-
“ sure; for if it were filled with more solid
VOL. II. E e “ substances,

“ substances, the bird could have no power to
“ compress it. But this is not the case, the
“ bird can compress its crop at pleasure; and
“ driving out the air, can thus drive out the
“ food also, which is forced up the gullet with
“ great ease. The young ones open-mouthed
“ receive this tribute of affection, and are thus
“ fed three times a day. In feeding, the male
“ usually supplies the young female; while
“ the old female supplies the young of the op-
“ posite sex. The food with which they are
“ supplied is more macerated in the beginning;
“ but as they grow older, the parents give
“ it less preparation, and at last drive them
“ out to shift for themselves; for when well
“ fed, the old ones do not wait for the total dis-
“ mission of their young; but, in the same nest,
“ are to be found young ones almost fit for
“ flight, and eggs hatching, at the same time.”

Although the fidelity of the turtle-dove is proverbial, the pigeon of the dove-house is not so faithful; and having been subjected to man, it has acquired incontinence among its other domestic habits. Two males are often seen quarrelling for the same mistress; and when the female admits the freedoms of a new gallant, her old companion shews evident marks
of

of displeasure, abstains from her company, or if he approach, it is only to chastise her. There have been instances when two males, being displeased with their respective mates, have thought proper to make an exchange, and have lived in great harmony with their new companions.

So prolific is this bird in its domestic state, that we have Stillingfleet's authority for asserting, that fourteen thousand, seven hundred and sixty were produced from a single pair in the course of four years. But the stock-dove seldom breeds above twice a year; for in the winter months, the whole employment of the fond couple is rather for self-preservation, than transmitting a posterity. But their attachment to their young is stronger than among those who breed so often; whether it be that instinct acts most powerfully upon them in their state of nature, or that their affections are less divided by the multiplicity of claims; but such is the fact.

Pigeons are very quick of hearing, have a very sharp sight, and when pursued by the hawk or kite, and are obliged to exert themselves, are exceedingly swift in flight. It is the nature of pigeons to love company and as-

semble in flocks, to bill in their courtship, and to have a plaintive note.

M. Duhamel asserts, “ that pigeons do not feed upon the green corn, and that their bills have not strength enough to search for the seeds in the earth; that they only pick up the scattered grains, which would be parched up by the heat of the sun, or infallibly become the prey of other animals.” He further adds, “ that from the time of the sprouting of the corn, pigeons live chiefly upon the seeds of wild uncultivated plants, and therefore considerably lessen the quantity of weeds that would otherwise encumber the ground; as is manifestly evident from a just estimate of the quantity of grain necessary to feed all the pigeons of a well stocked dove-house.” But the facts alleged by Mr. Worlidge and Mr. Lisle, in support of the contrary opinion are incontrovertible. Mr. Lisle relates, that a farmer of his acquaintance, who was a man of strict veracity, assured him he had been witness to an acre sown with peas, and the wet weather preventing their being harrowed in, every pea was taken away in half a day’s time by pigeons; and Mr. Worlidge says, “ It is to be observed, that where the flight of pigeons falls, there they

they fill themselves, and away, and return again where they first rose, and so proceed over a whole piece of ground, if they like it. Although no grain be perceptible above the ground, yet they know how to find it. I have seen them lie so much upon a piece of ground of about two or three acres sown with peas, that they devoured at least three parts in four of the seed, all of which, I am sure, could not be above the surface of the ground. That their smelling is their principal director, I have observed; having sown a small plot of peas in my garden, near a pigeon-house, and covered them so well that not a pea appeared above ground, in a few days, a parcel of pigeons were busy in discovering this hidden treasure; and, in a few days more, I had not above two or three peas left out of about two quarts that were sown; for what they could not find before, they found when the buds appeared, notwithstanding they were hoed in, and well covered. Their smelling alone directed them, as I supposed, because they followed the ranges, exactly. The injury they do at harvest on the peas, vetches, &c. is such, that we may rank them among the greatest enemies the poor husbandman meets with; and the greater, because
he

he may not erect a pigeon-house, whereby to have a share of his own spoils; none but the rich being allowed this privilege, and so severe a law being also made to protect these winged thieves, that a man cannot encounter them, even in defence of his own property. You have therefore no remedy against them, but to affright them away by noises, or such like. You may, indeed, shoot at them; but you must not kill them; or you may, if you can, take them in a net, cut off their tails, and let them go; by which means you will impound them; for when they are in their houses, they cannot bolt or fly out of the tops of them, but by the strength of their tails, after the thus weakening of which, they remain prisoners at home."

The pigeon was reckoned by the ancient poets, the favourite bird of Venus. Homer says, it was the office of pigeons to provide for the nourishment of Jupiter. This fable takes its rise from the same word which means, in the Phœnician language, either a priest or a pigeon; for it is allowed that the Curetes, or priest of Cybele, took care of the nourishment of Jupiter. The people of Ascalon had such a high veneration for pigeons, that

that they durst not kill and eat them, lest they should feed on their gods themselves; and they were particularly careful of all those that were produced in their city. The Assyrians also consecrated pigeons, because they had a notion that the soul of their once famous queen Semiramis had taken its flight to heaven in the shape of a dove.

Silius Italicus relates, that two pigeons formerly rested on Thebes, and that one took its passage to Dodona, where it gave an oak the virtue of delivering oracles; the other, which was white, flew over the sea to Lybia, where it perched between the two horns on the head of a ram, and gave oracles to the people of Marmarica. Philostratus says, that the pigeon of Dodona also delivered oracles; that it was of gold seated on an oak, and attended by a concourse of people who came thither, some to consult the oracle, others to sacrifice. There were always priests and priestesses there, who gained a comfortable subsistence by the offerings. Sophocles also informs us, that Hercules received an oracle from the pigeons of the forest of Dodona, which foretold the period of his life.

Pigeons,

Pigeons, whether in their wild state, or kept in a dove-cot, feed almost entirely upon grain, either in its perfect state, when first sown, or ripened in the hulls, or upon the buds as it begins to shoot out of the ground; they are particularly fond of horse-beans and grey-peas, and which being early sown, give them a seasonable supply for their young. They also frequent the fields of barley, buckwheat, tares, and white peas, to the great injury, and no less mortification of the laborious husbandman.

Although the wild pigeon contrives to provide for itself during the whole year; yet those of the dove-house require a plentiful supply of food in frosty weather, and what is stiled by the husbandmen benting-time, namely, from the middle of June to the beginning of July, when the grass, called bent, begins to have seed, and the peas have not become sufficiently mature for their subsistence; but those who keep them find a good account in being at this small expense, their produce much more than repaying them.

Though pigeons make a great deal of dirt, yet they do not like to live in it; and it is very
necessary

necessary that the dove-cot should be kept clean, and frequently strewed with gravel; they are exceedingly fond of salt; and what is rather singular, there is not a cure for scarce any of the disorders to which they are subject, without a plentiful supply of this ingredient; and herein we have a strong proof of the wonderful instinct bestowed by the Almighty Creator on all animals for their necessary preservation.

Besides those we have enumerated, which are bred solely for the supply of the table, there are great varieties kept for pleasure and curiosity; and these varieties by constant and various intermixtures, have been so extended, that it would be a no less vain than needless attempt, to enter upon every difference; but as the principal of them differ so materially from each other in figure and feather, they merit a description.

The *Carrier* evidently stands foremost amongst this class; they are rather larger than common sized pigeons, usually measuring from the beak to the end of the tail, fifteen inches, and weigh nineteen or twenty ounces; their feathers lie very close, even, and smooth; their flesh is naturally firm, their necks long and straight, and when they

stand upright on their legs shew a very elegant figure, and upon which account are usually stiled the king of pigeons. From the lower part of the head, to the middle of the upper chap, there grows out a white, naked, fungous flesh, which is called the wattle, and is generally met by two small protuberances of the same nature, rising on each of the under chap. The circle round the black pupil of the eyes, is commonly of a dusky red, though they sometimes approach a scarlet; these are also encompassed with the same sort of naked, fungous matter, which is very thin, generally of the breadth of a shilling; but when this luxuriant flesh round the eye is thick and broad, it denotes the carrier to be a good breeder, and one that will rear very fine young ones. The curious in these birds reckon upon twelve properties as essentially requisite to constitute a handsome carrier; three in the head, three in the eye, three in the wattle, and three in the beak. Those of the head consist in its flatness, straitness, and length; for instance, when a carrier has a very flat skull, a little indented in the middle with a long narrow head, it is greatly admired. The eyes should be broad, circular, and uniform; that is, they should be equal,

equal, full, and free from irregularities. Some mention the distance which ought to be between the back of the wattle and the edge of the eye; but this is not a property, for when a carrier lives to be three or four years old, has a broad eye, and a large wattle, they will join of course.

The wattle should be broad across the beak, short from the head towards the point of the bill, and leaning a little forwards from the head. This has given rise to an artful practice of ingeniously raising the hinder part of the wattle, filling it up with cork, and binding it in with fine wire, in so neat a manner as not to be easily detected.

The beak should be long, straight, and thick: though an inch and a half is a long beak, it must not measure less than one inch and a quarter in length; and being black is considered as an addition to its beauty.

The length and thickness of its neck, are so eminent a mark of its elegance, as not to be passed over in silence; some call this a property, and indeed it must be granted that it greatly encreases the beauty of this broad chested bird, and more especially so when the pigeon carries its head rather backwards, as it shews itself to great advantage.

The plumage of this bird is generally either dun or black, though there are also splashed, whites, blues, and piers of each feather; but the dun and black agree best with the before-described properties: yet the blues and blue piers being very scarce, are great rarities, consequently of great value, though they are inferior in the above properties.

This species of the pigeon was originally bred at Bassora, an ancient city of Persia, and from thence transmitted to Europe; they are called carriers, from having been used to convey intelligence by letters, from one city to another. It is from their extraordinary attachment to the place of their nativity, and more especially where they have trained up their young, that these birds were employed in several countries as the most expeditious carriers. They are taken from where they are bred, to the place from whence they are to return with intelligence. The letter being gently tied under the wing, in such a manner as not to incommode the bird's flight, it is then set at liberty to return. The winged messenger no sooner finds itself at large, than its love for its native home influences all its motions. It immediately flies up to a considerable height, making an extensive circle,
which

which having traversed two or three times, it then, with great certainty and exactness, darts itself by some unknown intuitive principle towards its native spot, though at the distance of many miles, bringing its message to the person to whom it is directed. By what visible means they discover the place, or by what compass they are conducted in the right way, is equally mysterious and unknown, but it has been proved by experiment, that they will perform a journey of forty miles in the space of one hour and a half; which is a degree of dispatch three times sooner than the swiftest four-footed animal can possibly perform. This method of sending dispatches was in great vogue in the East, and particularly at Scanderoon, till very lately, for, according to Dr. Russell, the practice is now discontinued. It was used there on the arrival of a ship, to give the merchants at Aleppo a more expeditious notice than could be devised by any other means; and which, Father Anril says, they would do in three hours, notwithstanding the distance from Scanderoon to Aleppo is thirty leagues.

Great attention was formerly paid to the training of these pigeons, in order to be sent from governors in a besieged city, to generals

als that were coming to succour it; from princes to their subjects, with the news of some victory or any other important transaction.

In the east, they kept relays of these pigeons in constant readiness to carry expresses to all parts of the country. When the governor of Damietta heard the news of the death of Orillo, he let fly a pigeon, under whose wing he had fastened a letter, this flew to Cairo, from whence a second was dispatched to another place, as was customary, so that the death of Orillo (Ariosto, canto 15.) was made known to all Egypt in the space of a few hours. But the simple use of them was known in very early times: Anacreon informs us, that he held a correspondence with his lovely Bathyllus, by a dove. Taurosthenes, by means of a pigeon, which he caused to be decked with purple, sent the news to his father, who lived in the isle of Ægina, of his victory in the Olympic games, on the very day he had gained it. When Modena was besieged, Brutus within the walls, kept an uninterrupted correspondence with Hirtius without, and this by the assistance of pigeons, setting at nought every stratagem of the besieger, Anthony, to stop these winged couriers.

riers. In the times of the Crusades, there are many instances of these birds being made useful in the service of war. Tasso relates one during the siege of Jerusalem; and Joinville another, during the crusade of St. Louis.

In order to train a pigeon for this purpose, take a strong, full-fledged, young carrier, and convey it in a basket, or bag, to some little distance from home, and there turn it loose; having repeated this two or three times, extending the distance every time, it may at length be taken ten or twenty miles, and so on, till they will return from the most remote parts of the kingdom. If not practised when young, the best of them will fly but insecurely, and stand a great chance of being lost; it is also very necessary that the pigeon intended to be sent with the letter, should be kept in the dark, and without food, for about eight hours before it is let loose.

The *Horseman*. It is a matter of great dispute, whether the horseman be an original pigeon, or whether it be not a bastard species, between a tumbler and a carrier, or a powter and a carrier, and so bred over again from a carrier; for it is certain that the more frequently this is performed, the stronger and more graceful the horseman becomes. There
is

is a species of this sort brought from Scanderoon, famous for the rapidity of their flight, and the vast distance they will go; which is the only incident that seems to support the opinion that they are an original stock; but this does not obviate the difficulty, for they may be bred after the same manner at Scanderoon, and so imported into Europe.

This bird is in shape and make very like the carrier, only it is less in all its properties; its body is smaller, its neck shorter; neither is there so much luxuriant encrusted flesh upon the beak and round the eye, so that the distance between the wattle and the eye is much more conspicuous. This species of the pigeon is decorated with a variety of colours; but the most distinguished, are the blue and blue pided, which generally prove the best breeders. When let out of their house they will fly four or five miles distance in a few minutes, sweeping over a very large circuit for an hour or two without resting; and it is this breed which is chiefly made use of in this country, for the deciding of bets, or the conveying of letters; the true genuine carriers being very scarce.

The *Dutch Cropper* was originally bred in Holland; the body is thick, clumsy, and short,
as

as are also the legs, which are feathered down to the feet; they have a large pouch or bag hanging under their beak, which they can swell or depress at pleasure;* their crop hangs low, but is very large; they are loose feathered on the thighs, and stand wide on their legs; they are gravel-eyed, and such bad feeders of their young, that as soon as they have fed off their soft meat, it is necessary to place their young ones under a pair of small runts, dra-goons, or powting-horsemen, who will act the part of nurses better than their thought-less parents.

This pigeon has a great variety of colours, and the Dutch are very careful in the breed of them; for when they are fed off their soft meat, they place the young ones under more tender nurses, and then put the old ones in different coops for a month, feeding them with hemp or rape-seed, which makes them very salacious, and then turning them together, they breed pigeons with very good properties.

The *Powting-Horseman* is a race produced between the horseman and the cropper; and agreeable to the number of times that their

* This, says Virey, is a general conformation in all the pigeon tribe, that the air can penetrate into their œsophagus.

young ones are bred over to the cropper, they have the appellation of first, second, and third breeding; and the more frequently this method is practised, the greater is the improvement the crop receives from it. There is a breed called the English powter, which, from the peculiar pains that have been taken in pairing, are brought to the greatest degree of perfection. So particular, indeed, have the curious been in the breed of them, that they have laid down rules for their size, figure, and almost the colour and situation of every feather. By these rules, a complete powter ought to measure eighteen inches from the tip of the beak to the end of the tail; to be regular shaped, with a hollow back, sloping off taper from the shoulders; the legs, from the toenail to the upper joint in the thigh, should measure seven inches. The crop ought to be large and circular towards the beak, rising behind the neck, so as to cover and run neatly off at the shoulders, with a small girt. Of the feathers, those composed of different colours are most esteemed, as the blue-pied, black-pied, red-pied, and yellow-pied, and in this quality to arrive to any degree of eminence, the front of the crop should be white, encircled with a shining green, interspersed with

with the same colour that it is pied, but the white should not reach the back of the head; there should be a patch, in the shape of a half moon, falling upon the chop, of the same colour with which he is pied; the head, neck, back, and tail, must preserve a uniformity of colour, and if a blue-pied pigeon, he should have two black streaks or bars near the end of both wings. When the pinion of the wing is speckled with white, in the form of a rose it is called a rose pinion, and is highly esteemed, though it is a great rarity to find any one complete in this property; their legs and thighs must be stout and straight, and well covered with white soft downy feathers; and the nine flight feathers of the wing should be white. The crop ought to be filled with wind, so as to shew its full extent with ease and freedom; for it is a very great fault when a bird overcharges his crop with wind, and strains himself so much, that he sometimes falls backwards, because he is not able to give a quick vent to the confined air, which makes him restless and heavy, and many a fine bird has, by this ill habit, either fallen into the street, down a chimney, or become an easy prey to the cats. The reverse is being loose winded,

so that he exhibits so small a crop, as to appear to as little advantage as an ill-shaped runt. He should play erect, with a fine well-spread tail, which must not touch the ground, nor sink between his legs, neither must it rest upon his rump; he should draw the shoulders of his wings close to his body, displaying his limbs without straddling, and to walk almost upon his toes, without jumping or kicking, as is the manner of the uploper, but moving with an easy majestic air.

The powder that approaches nearest these properties is the most valuable; and some curious persons, by a patient perseverance, and great expence, have bred these birds nearly to the standard prescribed.

The keeping them from food half a day, will cause them to swell their crop to its full extent, and make them appear to the best advantage; but great care must be afterwards used to put a stop to the dangerous consequence of their over-feeding themselves, which they will do, if not timely prevented. These pigeons make a very striking appearance on the outside of a building, though the favourite sort are seldom permitted to fly, for fear of the accidents already mentioned,

tioned, on account of their crops, particularly those that are apt to overcharge themselves with wind.

There is a great deal of trouble, time, and expense, requisite for breeding and rearing of young powters, for they require a great deal of attendance: every single bird must be parted during the winter season, and placed in a separate pen or coop, which must be lofty and spacious, that they may not get an ill habit of stooping. In the spring, when they are matched, two pair of dragoons should be provided to every pair of powters, for feeders or nurses; for they should never be permitted to hatch their own eggs, being such unfeeling parents, that, if left to themselves, they would frequently starve their young ones. The dragoons must be kept in a loft separate from the powters, and when the hen powter has laid her eggs, it should be shifted under a dragoon, that has also lately laid an egg, and the egg of the dragoon put under the pouter, it being very proper the powter should have an egg or eggs to sit upon, or she will quickly lay again; and this, often repeated, will be the cause of her death. Very great caution must be observed, and that in due time, to prevent these birds from

from gorging, which those with large crops are apt to do, and is often the occasion of their death.

A great deal of time must be spent upon them, to make them tame and familiar, for the powter should be used to company, and frequently attended, chuckled, and talked to, during the winter, stroking their backs, and also clacking to them as a hen does to her chickens, or they will become shy, and lose one of their greatest properties, for which they are so much admired, which is called shewing.

In breeding, great care must be taken not to match a cock and hen of the same family, for if so, the race will soon degenerate. The powters were formerly the greatest favourites, but they have now lost some of their preference, from an opinion that an almond tumbler would be equally handsome, if bred with the same care and attention.

The *Uploper* is a native of Holland, being originally bred there: it nearly resembles the English powter in all its properties, only it is smaller in every respect; it has a very round crop, in which it commonly hides its bill; it has small slender legs, with its toes short and close together, on which he trips so
exactly

exactly when walking as to leave the ball of the foot quite hollow ; it plays very upright, is close-thighed, and it is the custom of this pigeon, when approaching the hen, to leap to her with its tail spread, from hence the name uploper is derived, from the Dutch word *uplopen*, to leap up. It is a great rarity to see any of these pigeons pied, they being almost always either all white, black, or blue.

The *Parisian Powter*, though brought into England from Brussels, is originally a native of Paris ; it partakes of the same nature as the English powter, though it is not so well made ; its body and legs are short ; it has generally a long, but not a large crop ; it is thick in the girt, and is generally buff or gravel-eyed. This bird is greatly admired for its plumage, which is very elegant, and peculiar to this species only, every feather being streaked with a variety of colours, the flight excepted, which are white ; the more red that is interspersed with the other colours of this bird, the greater is the value set upon it.

The *Dragoon* is generally considered as having been originally the produce of a horseman and a tumbler ; it is however certain,

tain, that by frequently matching their breed to the horseman, they will acquire great strength and agility. This pigeon is an excellent breeder, and makes a very tender nurse; for which purpose they are frequently kept as feeders for rearing young powters, Leghorn runts, and some other pigeons, who either breed so fast that they cannot conveniently give their young ones due attendance, or are destitute of that natural fondness, which is the characteristic of this bird.

The dragoon is a lighter and smaller made pigeon than the horseman, and is said to be more rapid in its flight for ten or twenty miles; but if the horseman be well bred, it will always distance them at a greater number of miles. They should be flown and trained whilst young, in the same manner as the horseman. Among the several remarkable instances of the celerity of the flight of this bird, there is one supported by undeniable testimony, of a dragoon that flew from Bury St. Edmund's to London, which is seventy-six miles, in two hours and a half.

The *Tumbler* derives its name from an intuitive principle of instinct peculiar to its species, which is, their extraordinary motions
as

as they are rising in the air. This is effected by turning themselves over backwards, much after the same manner that an expert genius in tumbling performs what is called the back-spring. The tumbler is a very small pigeon, its body is short, it has a slim-neck, is very full breasted, with a short round head, and small spindle beak, and the iris of his eyes is of a clear pearl colour.

These pigeons, besides their tumbling, as mentioned above, will frequently rise to such an amazing height in the air, as to be almost imperceptible to the keenest eye; and when familiarised to each other, will keep such close company, that a flight of a dozen may almost be covered with a large handkerchief. At this height, especially if the weather be warm and clear, they will continue upon the wing for four or five hours upon a stretch; it is reported, that some well-bred pigeons of this sort have flown for nine hours successively, when they have been up at their highest pitch: they seldom or never tumble but when they are beginning to rise, or when they are coming down to pitch.

The Dutch tumbler nearly resembles the English, only it is larger, with a bigger head,

accompanied with a circle of thin skin round the eye, like that of a clean dragoon, and is frequently feather-legged. It has been observed by some, that they are apt to tumble immoderately, and to lose ground in flying, by sinking too low amongst the rest of the flight, which, if true, is a very great fault, though some of the English breed fall into the same error ; and it must be allowed that there are some very good of the Dutch breed, not at all inferior to the English. The genuine English tumblers are almost always white, blue, or black ; and therefore it is supposed that those with other coloured feathers, have had them introduced by a union with the Dutch, which pigeon displays in its plumage, a great variety of colours, as reds, yellows, duns, blues, blacks, whites, silvers, and, in short, a delightful composition of all those colours, interspersed with the white.

There is a species of this pigeon, known by the name of *bald-pated tumblers*, the plumage of which consists of a great variety of colours ; they have a pearl eye, a clean white head, with a white flight and tail, and are reckoned very good flyers. When they are aloft in the air, in fine clear weather, the contrast of the
feather

feather shews, if the distance be not too great, and they make a very pleasing appearance, though the blue ones have gained the greatest reputation for their lofty flights. There are also some called black or blue-bearded, that is, when either of those colours are ornamented with a long dash of white, reaching from the under jaw and cheek, a little way down the throat; when this is well shaped, and they run clean in the flight and tail, as above described in the bald-pated sort, they are very handsome birds.

The *Almond Tumbler*, or as it is by some called the *ermine tumbler*, is a very beautiful and valuable species, and derived its origin from the common tumblers (which it nearly resembles in shape and make) by being judiciously matched so as to sort the feather, viz. yellows, duns, whites, blacks, black-grizzled, black-splashed, &c. but as these require a length of time, they are not attainable without patience and perseverance: however, when they are brought to a tolerable degree of perfection, they are esteemed by some as the greatest curiosity in the whole tribe of pigeons.

Some of these birds are so magnificently

H h 2

elegant

elegant in their plumage*, that the rump, tail, back, and flight, have been compared to a bed of the finest and best broken tulips, or to a piece of the best and highest polished Egyptian pebble; the more they are variegated in the flight and tail, especially if the ground be yellow, the greater is the value set upon them; for those of a fine bright yellow ground have always the precedence of all other colours, it being the colour the hardest to acquire. To be complete in feather, the rump, back, and breast, must be variegated, and the flight not barred. There are some of these pigeons that are variously and curiously intermixed with the three colours only, as yellow, white, and black, but these are very scarce. The almond-tumbler never arrives at its full beauty of feather, till it has moulted several times, and what is remarkable, it increases in beauty every

* Lucretius beautifully paints the colours of the throat of pigeons, *Rerum Naturæ*, Lib. II.

Præterea, quoniam nequeunt

Sine luce, colore, &c.

Seneca also, in his *Questiones*, c. 6. mentions a verse of Nero upon the same subject :

Colea cytheriacæ splendent agitata columbæ.

David also, in his 67th Psalm, makes mention of it.

every year; but in the decline of life, when it is very old, changes to a mottled, splashed, or some other colour.

The properties of the yellow and black mottled tumblers, should coincide with those of the almond tumbler, the plumage excepted; the former of these must have a yellow ground, and a body mottled with white, with a yellow tail and flight; the latter must have a black ground, its body also mottled with white, together with a black flight and tail. Both of these last described are exceedingly pretty birds, and are also very useful, especially when they agree in their other properties, to occasionally intermix with the almond. Several persons, after rejecting the foul-feathered birds of this species, and judiciously coupling the best coloured ones together, have brought them to a great degree of perfection, and have been so well satisfied for their labours, as to continue no other but the breed of the almond-tumbler. Indeed, the elegant plumage of some of these birds baffles all description, and it is in vain to attempt to do justice to their beauty.

The *Leghorn Runt* is a noble, large, full bodied pigeon, it is close feathered, short in the back, very broad chested, and frequently measures seven inches and a quarter in the length of its legs; when he walks, he carries his tail raised

raised up in the nature of a duck's, but hangs it down when he plays. He is goose-headed and hollow-eyed, with a longer neck than any other pigeon, which he carries bending after the manner of a goose; the eye is encircled with a thin skin broader than that of the Dutch tumbler, the beak is very short, with a small wattle over its nostril, and the upper chap projects a little over the under one.

The Leghorn runt is a hardy bird, and breeds tolerably well, but they are bad nurses, and ought not to be suffered to bring up their own young ones; it is therefore proper to shift their eggs under a dragoon, or some other tender nurse, in the same manner as directed for the powter, being careful to give them a young one of some sort, to take off their soft meat, and by this method they will succeed very well; and what is remarkable in all the different species of runs, they increase in size, till they are three years old. The matching of them with the Spanish runt greatly improves the size of the genuine breed, (which is at present very scarce) and makes them increase the faster; and some of this sort, when brought to table, have appeared as large as a pullet.

As to their plumage, they are frequently of a grizzled colour, ermined round the neck; but those most esteemed are either red, white,
or

or black-mottled. This species of runt is of greater value than any other kind of runts, though there is a material difference in them, some of them being very indifferent birds, though natives of Leghorn. It was originally bred at Piso, a city of Tuscany, which is situated ten miles north of Leghorn, and from this last city imported into England.

The *Spanish Runt* came originally from a sea-port town of Spain, hence the name of Spanish Runt; it is a short thick-legged, flabby-fleshed, loose-feathered, bird, with a remarkable long body; some of them measuring twenty-three inches in length, from the apex of the beak, to the extreme end of the tail, and it does not carry itself so upright as the Leghorn runt. The feathers of this are so uncertain, and of such a variety of colours, that a judgment cannot be formed of the sort by the colour, though some of the best are reported to be of a blood-red, or mottled colour. This bird is so very short-legged, that it frequently breaks its eggs, by sitting too heavy on them in the nest; to prevent which, it is not unusual to put a pair of neat chalk or ivory eggs into the nest, and by that means the real ones are preserved. There is a long-legged pigeon, which nearly resembles the Spanish runt, for it is said to be brought from their settlements in the West Indies.

The

The *Runt of Friesland* is a native of the province, whose name it bears ; it is somewhat larger than a middle-sized runt, and what is very singular, its feathers are all inverted, and stand the wrong way ; whence, if it have any admirers, it must be on account of its oddity, for it has a disgusting appearance : they are at present very scarce in this country.

There are several other kinds of runts, as the feather-footed runt of Smyrna ; which is a middle-sized pigeon, with so many feathers sprouting from the outside of its feet, as to have the appearance of small wings ; some of these feathers measure four inches and a half in length. There is a large Roman runt, which is so big and unwieldy it can scarcely fly ; also the common domestic runts, which always compose that medley of pigeons, kept on purpose for the table, and are so very common in inn-yards and other places ; these last sort are good feeders, and make very useful nurses for the better sort of pigeons.

The *Trumpeter* is nearly as big as a middle-sized runt, and very like it in shape and make ; its legs and feet are covered with feathers ; the crown of its head is very round, like that of the finnikin and nun, only it is larger, and the larger the head is, the more it is esteemed ; it is in general pearl-eyed, and black-mottled as to
its

its feather ; but the surest mark by which to distinguish a good trumpeter, is the tuft of feathers which sprouts from the root of the beak, and the larger this tuft grows, the greater is the value set upon the bird. The more salacious it is, the more it will trumpet : it derives its name from its imitating the sound of a trumpet after playing, which it always does in the spring of the year, when that genial season returns, which gives, as it were, new life and vigour to the whole creation ; those who are fond of hearing it trumpet at other times, feed it very high with hempseed, which always has the desired effect.

The *Spot*. Whence this pigeon derived its origin is uncertain, but it was first imported into this country from Holland ; it has its name from a spot just above its beak, upon the top of its head ; the tail feathers are for the most part of the same colour with the spot, but the body is generally all white. The tail and spot in some of these birds are either yellow, red, or black ; there are some blue, but these are rare ; they make an exceedingly pretty appearance when they spread their tails to fly, and what is remarkable in this species, they always breed their young ones of the same colour as themselves.

The *Laughter* is a native of Palestine in Asia, and was brought into Europe by the ships which trade to and from Turkey. This bird, in shape and make, very much resembles a middle sized runt; its plumage is generally red mottled, but sometimes it is blue, and it has a very bright clear pearl eye, inclining to white. When the cock seeks for and begins to lack the hen, he has a kind of rough coo, like the bubbling of water poured from a jug, and then makes a rattling noise, very much like a gentle convulsive laugh, whence it derives its name.

The *Nun* is a small pigeon, and has a pleasing contrast in its feathers; the plumage is so remarkable that its head is almost covered with a veil of feathers, which gives it the name of the nun. Its body is chiefly all white, its head, tail, and the six flight feathers of its wings entirely red, yellow, or black; and agreeably to this they are called either red-headed, yellow-headed, or black-headed nuns. The nun should have a pearl eye, with a small head and beak; its head should be covered with a hood of white feathers, rising from the back part of the head, and the larger this tuft or hood is, the handsomer is the appearance of the bird.

The

The *Helmet* is something larger than the nun; the head, tail, and flight feathers of the wings, for the most part, preserve a uniformity of colour, either yellow, red, blue, or black, but all the rest of its body is generally white, so that the most material difference between it and the nun is, the former has no hood on the back part of the head, and is frequently gravel-eyed. They receive the name of helmets from their heads being ornamented with a tuft of fine soft feathers, which are always of a different colour from the body, and from its faint resemblance to that ancient piece of armour formerly worn as a covering for the head.

The *Jacobine* is usually called for shortness, the Jack; it is a very pretty bird, but the genuine breed is greatly degenerated by intermixing them with the ruff, with a view of improving the chain by the length of the ruff's feathers; but by this ill-judged practice, the chain is greatly injured; the bird bred larger, is much flimsier in its hood and chain, with an additional length of beak; in a word, it is deteriorated in all its original properties; for the real jack is one of the smallest pigeons, and the less they are, the more they are valued: it has a range of inverted feathers on

the back part of its head, which turns towards the neck, like the cap or cowl of a monk, whence it derives its name of Jacobine; the religious of that order wearing cowls or caps, joined to their garments for the covering of their bald pates. The upper part, therefore, of this feathered covering, is called the hood, and the more compact and close this feathered ornament grows to the head of the bird, so much the more does it enhance its value amongst the curious. The Dutch stile the lower part of this range of feathers, the cravat, but with us it is called the chain. The feathers which compose this chain should be long and thick, so that by laying hold of the bill, and giving the neck a gentle stretch, the two sides should lap over each other; but such real good ones are very scarce in this country. Though this breed has been much neglected with us, the Dutch and French breed them to great perfection. We are told that not long since an eminent naturalist purchased six pair of these pigeons at Rotterdam, and transmitted them to England, with a view of establishing the true breed in his native country, but his design was unfortunately frustrated by a merciless cat, who accidentally got into the loft where they were kept,

kept, and destroyed every one, to the great regret of all those who are curious in the breed.

The real Jacobine is possessed of a very small head, with a short spindle beak, and clear pearl eye, and the less these properties are the better. As to its plumage, there are yellows, reds, mottled blues, and blacks; though the yellow coloured birds always claim the precedency, yet of whatever colour, they must always have a white tail and flight, and a clean white head; the legs and feet of some of these birds are covered with feathers, others are naked and without any; but this is of no importance, as each sort has its admirers.

There is so great a similarity, both in shape and make, between the ruff and the jacobine, that the one has frequently been sold for the other; but the ruff has a longer beak, and larger head, it is also rather a larger pigeon; the iris of its eyes are in some of a gravel, in others of a pearl colour; the chain does not flow so near to the shoulders of its wings, though both the hood and chain are longer, yet they are not so close and compact as the jacobines, and are easily disturbed with every puff of wind; they likewise fall more backward

ward off the head, in a rumpled discomposed form, and from this the pigeon receives its name. The plumage of this bird is also so similar with that of the jacobine, that it is not at all surprising it should frequently have been mistaken, but by attending to the above description, they may easily be distinguished.

The *Turbit* is by some supposed to derive its name from a corruption of the word *cort-beck*, or *curtbeke*, as it is called by the Dutch, which word seems to be originally derived from the French, *court-bec*, and signifies a short bill, for which this pigeon is remarkable. It is a small pigeon, very little bigger than a jacobine: it has a round button head, and a short beak; it has a tuft of feathers growing from the breast, which opens and spreads both ways, sprouting out like the chitterlin of a shirt: this is called the *purle*; it has also a gullet which reaches from the beak to the *purle*; this bird is admired according to the largeness of its *purle*. As to the plumage, there are yellows, duns, reds, blues, blacks, and some that are chequered; the back of its wings and the tail should be of one entire colour, the yellow and coloured ones excepted, whose tails must be white; and

and there ought to be bars of black across the wings of the blue coloured ones ; but the rest of the body ought to be white. They are very genteel, airy pigeons, and make very good flyers, if properly trained when young. There are some of this species which are of a uniform colour, being all black, blue, or white.

The *Owl* has a mild, pleasant, insinuating aspect ; it is rather less than a jacobine, with a gravel eye, and a very short hooked beak, much resembling that of an owl, and from which it derives its name. The purle in this bird is rather larger, and opens and expands itself more like a rose, than that of the turbits ; but in every other respect, both in shape, make, and plumage, this bird is very like the turbit, the beak excepted. Particular care ought to be taken, that the breeding places where these birds sit, are made dark and private, for they are naturally so very wild and timid, that the least noise affrights them, and when disturbed, will fly off their eggs.

The *Capuchin*, like the jacobine, receives its name from an order of bare-headed monastics ; it has a longer beak than the jacobine, and is somewhat larger in its body ; it has no chain, but a very pretty hood, and is in
plumage

plumage and other properties the same as the jacobine. Some positively assert it to be a distinct species, while others as confidently affirm it to be a bastard breed, between a jacobine and some other pigeon; however it is beyond a doubt, that a jacobine and another pigeon will breed a bird so exactly similar to what is called the capuchin, as will greatly embarrass any one to distinguish between it, and what is termed a separate species.

The *Finnikin*, in make, shape, and size, differs very little from the common runt; it has a gravel eye, with a tuft of feathers growing on the back part of its crown, which falls down its neck, hanging like a horse's mane: it has a clean leg and foot, and its plumage is always blue or black pied. This pigeon, when wanton, is addicted to very odd antics; it first rises over its hen, spreading and flapping its wings, and turns round three or four times; it then reverses, and turns as many times the contrary way.

The *Broad-tailed Shaker* has a frequent tremulous motion, or shaking in the neck, which joined to the breadth of its tail when spread, gives the bird the name of broad-tailed shaker. It is possessed of a long, taper, handsome neck,
which

which it erects in a serpentine form, rather leaning towards its back, somewhat like the neck of a swan; it has a very short beak, and is exceedingly full breasted, with a tail composed of a vast number of feathers, very seldom less than four and twenty, and never exceeding six and thirty, which it spreads in a very striking manner, like the tail of a turkey-cock, and raises it up to such a degree, that the tail appears joined to the head like a squirrel's, and from which it has received from some the name of fan-tail; but when it is so crowded with feathers, it occasions it frequently to droop its tail, and hinders it from throwing it up to meet its head.

Though the general colour of its plumage is entirely white, there are yellow, red, blue, and black peds, and some all blue; but the whites are the favourite birds, as they have by far the noblest carriage, both in their tail and head. There is another kind of broad-tail shakers, which differ in no respect from the above, the neck excepted, which is shorter and thicker.

The *Barb* is a native of Barbary in Africa, and receives its name from the country from

whence it came. It is in size rather larger than a jacobine, has a short thick beak like a bullfinch, encrusted with a small wattle, and a naked circle of a thick spongy red skin round about its eyes, like that of the carrier; when the feathers of the pinion are inclinable to a dark colour, the iris of its eyes are of a pearl colour, but when the pinion feathers are white, the iris is red, as is observable in some other birds; the redder in colour, and the wider the circle of tuberos flesh round the eye spreads, the greater is the value set upon the bird, though this circle is very narrow at first, and does not arrive at its full size, till the bird is four years old. Some of this species are ornamented with a pretty tuft of feathers, sprouting from the back part of the crown of its head, resembling that of the finnikin, but there are others without any. The plumage of the original barb is either dun or black, for though there are piers of both these colours, they are supposed to be bred from a barb and a mahomet.

The *Mahomet* was long considered by some of the most curious in the breed of pigeons, to be in reality only a white barb, which colour gave the red tuberos circle round its eyes

eyes a very fine effect; but some modern breeders give a different account, and describe the bird in the following manner:

The pigeon, named Mahomet, is of a fine cream colour, with black bars across its wings; its feathers are very remarkable; for though the outside, or surface of them, is of a cream, yet the underside, or that part next the body, is of a dark sooty colour, as is also its skin and fine feathers, which is peculiar to this pigeon; it is about the size of a turbit, and instead of a frill, has a fine gullet, with a handsome seam of feathers; it has a thick short-made head, with an orange-coloured eye, encompassed with a small naked circle of black flesh; its beak has a small black wattle on it, and is short and thick, like that of the bullfinch. This pigeon is said to take its name from the following story:

Mahomet, the prophetic impostor, and first propagator of the Turkish persuasion, and author of the Alcoran, or book of laws by which it is governed, is reported by several authors, and amongst those some of undeniable veracity, as Grotius, Scaliger, and Sionita. to have made use of the following artful stratagem, to deceive the credulous and unthinking

Arabians into a belief that he had frequent conferences with the Holy Spirit, and received from him his mission as a prophet, and the new doctrines he was about to propagate. This piece of deceit he carried on in the following manner, which, joined to the victories he had obtained, made his religion be embraced by all ranks of people. He procured a beautiful young pigeon, of this species, which, from the extraordinary whiteness of its plumage, was no degrading symbol of purity and the celestial dove. This bird he brought up by hand, making it so very tame and familiar, that he taught it to take its food out of his ear, till at length the pigeon frequently flew upon his shoulder, putting its beak into his ear in search of its food. This bird he imposed upon the Arabians as the visible appearance of the Holy Ghost, whispering the dictates of the Almighty, and teaching him the precepts of his new laws.

The *Lace Pigeon* is in great plenty in some parts of Holland, where it was originally bred: it is about the size of a common runt, and not unlike it in make and shape, but the colour of its plumage is always white; it differs in the make of its feathers from all other pigeons, whose

whose plumage is composed of a close smooth feather; but the web or fibres of the feather in this bird appear quite unconnected with each other, and as it were disunited throughout its whole plumage; in short, the make of its feather is very peculiar, and gives the bird a pretty, though singular appearance, and from hence it derives its name of lace pigeon.

The *Frill-back*, like the last-described, is remarkable only for the peculiar turn of its feathers, all of which look as if they had been distinctly and purposely raised at the end with a small round-pointed instrument, after such a manner as to make a small hollow in each of them. It is less in size than the common runt, though very much like it in shape; and its plumage is always white.

The *Smiter*, in shape, make, and diversity of plumage, nearly resembles the tumbler, the size excepted, it being a much larger bird. The smiter is supposed to be the same species that the Dutch call the *drager*; when it flies, it has a peculiar tremulous motion with its wings, and commonly rises in a circular manner, the male, in general, flying much higher than the female, and though it does not tumble, it has a particular manner of flapping its wings,

wings, with which it makes so loud a noise as to be heard at a great distance, which is frequently the cause of its shattering or breaking its quill feathers.

The *Nincombar pigeon* is something larger than the common dove-house pigeon, and has a long, dark, ash-coloured bill; the iris of the eyes red, the head black, adorned with a glossy blue. The neck beautified with curious long feathers of various colours; some of them hanging down lower than the breast, of a red, blue, and purple, intermixed with a gold colour, and shaded with a fine green; the back of the bird is all covered with broad feathers of the same mixture and colours; the three first quill-feathers of the wings, and the three last rows of coverts blue, the scapular feathers, green; the rest of the coverts and quills of a brown dusky-coloured red: the breast, belly, and thighs, pretty much of the same colour, the feet and legs of a dirty yellow, the fore-sides covered with a sort of brown scales; the tail is white. They are found in the islands of Nincombar, near Pegu in India, where they feed upon rice in the husk, and live wild in the woods, making the same cooing noise as the English queest, or wood pigeon.

The

The *Chinese pigeon*, with which we shall conclude our description of this genus, is a beautiful little bird; it is a native of Pekin in China, and was imported into Europe in some of the Company's ships; it is in size rather less than the common swallow; the sides of the head are yellow, but the top and the space round the eyes are of an ash-colour; it has a bluish ash-coloured beak, and the iris of its eyes is of a fine white; the extreme feathers on each side the head and neck are red, and there are blue feathers about the rise of its wings. The hind part of the neck and back are brown, and the extremities of the feathers black; those on the shoulders are lighter, and variegated at the ends with black and white. The first and last covert feathers are black, but are white on their external edges; the long feathers of the wings are black, the edges of which are tipped with white, and the belly and breast are of a lovely pale rose colour. The tail, which is composed of twelve feathers, is a mixture of dusky and bright; the legs and feet are red, and the claws black.

In the whole race of pigeons it is extremely difficult to decide with a certainty between the cock and hen; in general, however, the cock
may

may be distinguished by the following particulars.

First, the cock has almost always a longer and stouter breast-bone than the hen. Secondly, his head and cheeks are broader and fuller, and he has a bolder look.

In young pigeons, that which squeaks longest in the nest generally proves to be a hen; and where there two in the nest, the largest usually turns out to be a cock. The coo also of the cock is longer, louder, and more masculine than the hen's, and the cock often makes a half round in his playing, which the hen seldom does, though a warm lively hen will sometimes shew, and play very like a cock.

It has already been observed, that pigeons are very constant when once mated to each other, except in times of long illness, death, or old age; yet it is sometimes attended with difficulty to couple fancy birds to their liking.

In order to effect this, two coops should be built close together, with a slight partition between them, so contrived that the birds may see each other, and feed out of the same vessels; being well supplied with hemp-seed, they will soon become wanton, and when the hen begins to sweep her tail and shew to the cock, as he plays
in

in the adjoining pen, you may then remove her to his, and they will soon agree. When this convenience is wanting, and they are at first both put into one coop, it is very necessary to put the cock in first, for three or four days, that he may get master of the coop, or else they will quarrel so much as to end in an irreconcilable hatred ever after. But when the cock is once master of his house, he will always maintain it, and by a stout and well-timed resistance, make his mistress yield to his authority.

The common dove-house pigeon, being removed, as it were, but one step from a state of nature, is hardy, and will seek its own food, living upon almost any grain; but it is far different with the fancy birds who are much more delicate, and always used to tender treatment; therefore some short observations on their food is very necessary.

The pigeon is a granivorous bird, and may be fed with various sorts of grain, as wheat, barley, oats, peas, horse-beans, vetches, tares, rape, and canary, or hemp-seed. But of all grains old tares prove to be the best suited to the nature of these birds; new tares should be given very sparingly, especially to young pigeons, as they are very liable to put them

into a scouring, though old tares will have the same effect, if by any accident they have been mixed with salt, or damaged by sea-water; for though pigeons are very fond of salt, too much is very pernicious: for example, if they are supplied with sea-water instead of fresh, it will soon kill them.

Horse-beans are esteemed the next best food, but the smaller they are the better: there is a French sort called small ticks, which make good food, and are cheaper than tares, but there are two unfavourable circumstances attending these: First, they are hard of digestion, and not proper diet for pigeons who have young ones to feed. Secondly, they are improper for young pigeons, for sometime after they have begun to feed themselves, as they are apt to stick in the gullet and choak them; indeed they are dangerous for any pigeon whose gullet is small, which is the case with most long-necked ones. No kind of beans are fit diet for Dutch croppers, or any other large cropped pigeons, as they are apt to make them gorge.

Wheat, barley, oats, and peas, ought only to be given now and then for a change of diet, as they are very apt to scour them. Rape and canary, and hemp-seed, is a diet that pigeons

geons are immoderately fond of, but this, for many substantial reasons, must not by any means be made a constant diet.

Pigeons are subject to a variety of disorders, which, together with the proper remedies, has been most ingeniously treated on by a Mr. Moore, who, to great skill, from his fondness of breeding them, had the advantage of long practice, and whom, therefore, in this instance we shall invariably follow. The first disease he mentions is the corruption of the egg in the uterus, which usually arises from the over salaciousness of an unmatched hen, and principally proceeds from high feeding, who will often breed eggs without any connection with the male, though they seldom bring them to perfection, and sometimes do not bring them forth, so that they decay in the womb: there is no remedy for this but a low diet, and to match her to a cock in time, when it is evident the disorder arose from high feeding.

For the wet droop, it is good to give them three or four pepper corns, once in three or four days, and steep a handful of green rue in their water, and as this is very wholesome, you may let all the other pigeons drink of it.

The dry roop is usually known by a dry husky cough, that always attends it, and is supposed to proceed from a cold, to which they are very subject, particularly during the time of moulting: to remedy this, give them every day three or four cloves of garlic.

The canker usually takes its rise from the cocks pecking and fighting one another: though some say, that giving them water in a metal, or a tin vessel, will bring on this disorder. For this, rubbing the affected part every day with burnt allum and honey, will be found a good remedy; but when this has not the desired effect, dissolve five grains of Roman vitriol into half a spoonful of wine vinegar, mix it with the former medicine, and anoint the part affected. Some people strip off the scurf and make it bleed, before they apply the remedy, but this medicine is sufficiently searching without that being done.

When the flesh, or wattles, round the eyes of the carrier, horseman, or barb, are torn and pecked; bathe them with stale urine for several days; if this do not prove successful, dissolve two drachms of allum in one ounce and a half of water, and wash the aggrieved part; but
when

when the case is very obstinate, mix half an ounce of honey with twenty grains of red precipitate, and anoint the part, and it will certainly cure it.

Pigeons are infested with small insects called lice, particularly during the summer months; when this happens, smocking their feathers well with tobacco, will be found a certain remedy.

There is another kind of small vermin, which are very pernicious, and frequently prove fatal to the young ones in the nest, especially when first hatched, by creeping into their ears; to prevent this, sprinkle the dust of tobacco in the nest, and also over the young pigeons, and it will kill these vermin: they are called the blacks by some, and by others, pigeon bugs.

Gizzard-fallen, is when the gizzard sinks down to the vent; this is generally thought to proceed from weakness, though it is perhaps caused by feeding them on too much hemp-seed. There is no cure for this malady, unless nature will co-operate with an alteration of diet, which in young pigeons it sometimes does.

Navel-fallen, is when there is a sort of a bag hanging down near the vent. This distemper is frequently desperate, and is only to be cured
by

by giving them clary, or some other strengthening things of a similar nature.

Some pigeons, as powters, and croppers, are apt to overcharge or gorge themselves, that as, when they have fasted rather longer than usual, they will eat such a quantity that they cannot digest it, but it will stay and corrupt in the crop, and be the death of the pigeon; when this happens, put the gorged bird in a tight stocking, with its feet downward, stroaking up the crop, that the overloaded bag of meat may not hang down: then hang up the stocking on a nail, keeping it in this posture, only supplying it with a little water now and then, till the food is digested, and by this method they will frequently be saved; but when taken out of the stocking, it must be put in a coop or open basket, and fed very moderately, for if left to itself it will gorge again. When this method does not succeed, slit the crop from the bottom with a sharp pair of scissars or penknife, take out the corrupted meat, wash the crop, and sew it up again. This method has often proved successful, though the crop will lose its roundness: some take off the crop by ligature, that is, tying the part of the crop that contains the undigested food, tight round with

with a string, and let it remain till it drops off. This method never fails, but the shape of the crop is entirely ruined for ever after.

The vertigo, or as it is commonly called the megrims, is a disease in which the pigeon flutters about at random, with its head reverted in such a manner, that its beak rests upon its back. This malady is pronounced incurable by most, and if it baffle the power of the following remedy it is so; infuse in half a pint of water, one ounce and a half of spirit of lavender, and a drachm of the spirit of sal ammoniac, that has been distilled with quick lime; in the course of a day force down the bird's throat about a spoonful and a half of this composition, and if the bird finds benefit, repeat the medicine every third or fourth day, only lessening the quantity, and in the intermediate days give it a clove or garlic, or three or four pepper corns; if, after a trial, no amendment is shortly perceived, no hopes of its recovery can be entertained.

When pigeons do not moult freely, or are at a stand in their moulting, so that they do not throw their feathers kindly, it is a never-failing sign of a bad state of health: to amend this, the following method will be of service ;
put

put them into some warm place, and pull out their tail feathers, mixing a good quantity of hemp-seed with their common food ; also a little clary or saffron, thrown into their water, though some prefer cochineal, or elder-berries, for this use. Pigeons are also liable to a scouring, particularly in moulting time, which makes them very weak, faint, and thin : as a remedy for this, give them pump-water, with a lump of chalk in it, or force the quantity of two horse-beans down their throats every day ; if this fail, pour some smith's forge water down their throat, which is very binding. The grit that remains in the trough under a grind-stone, where they grind edge-tools, is very good for a scouring, but must be used in very small quantities, it being of a very costive nature.

The distemper called the small pox, which breaks out in eruptions, or pustules, full of yellow matter, on their bodies, wings, and legs, is cured by opening the pustules, and applying burnt allum and honey, or touching them with Roman vitriol.

When pigeons are sick, heavy, or droop their wings, give them once a day, a couple of spiders rolled up in butter, and if you think it safe to venture them, let them fly.

When

When pigeons are lame, or the ball of their foot swelled, either from cold, the being cut with glass, or any other accident, spread some Venice turpentine on a piece of brown paper, put it to the part affected, and it will heal it in a few days.

The flesh-wen is a fleshy tumour, which arises on the joints of the legs or wings: this may be either opened or cut off; if opened, take out the kernel, and wash it with allum and water; if cut off, the part may be afterwards healed with almost any salve.

The bone-wen is a hard tumour, growing upon the joints like the last; this is very rarely cured, and the bird affected with it will not breed: some attempt to cure it with a mixture of black soap and quick lime: but if this is suffered to lie on too long, or made too strong, it will eat off the leg, or any other part where it is applied, it being a strong caustic.

The core. This malady is so called, from its resemblance to the core of an apple; it is hard, and usually of a yellow colour interspersed with red, and is mostly seated in the anus or vent.—This must be ripened; to effect which, keep the pigeon loose, by giving it a gentle purge of tobacco; a small quantity will

do; this will sometimes make them discharge the core themselves; if not, when ripe it must be drawn out.

The birds, particularly the common sort, are frequently afflicted with scabs on the back and breast, which makes old ones so weak that they cannot fly abroad in search of food, and absolutely kill the young ones; the following recipe is recommended as a cure. A pound of dill-seed, a pound of fennel-seed, and the same quantity of cummin-seed, an ounce and a half of assafoetida, a quarter of a pound of bay-salt, and of common salt the same quantity. Mix all these ingredients with some fine clean clay, together with a small quantity of flour. This being prepared, bake it in two pots, and set it on a stand in the pigeon-house, and the birds will continue to pick it till they are cured.

The dalliance practised by this bird during the time of courtship, is both peculiar and engaging. The cock, when salacious, will, by a voice at that time exceedingly sweet and pleasing, and by several endearing and pretty gestures, woo the female, and endeavour to gain her affections; she, when complying, soon discovers it by her motions, as spreading her wings,

wings, nodding her head, and sweeping her tail; from hence they proceed to billing, that is, the hen puts her beak into the cock's who appears as if feeding her; after this they seek for a nest, or some convenient place, to deposit their eggs, into which they will carry such necessities as best suits their purpose; some making a good nest, others hardly any.

When the hen is near the time of her laying, the cock will follow her from place to place, not allowing her to be at peace any where but in her nest. And some cocks are so very intent, that at this time, they will hardly permit a hen to eat, which will make her very weak, and frequently cause her to lay an imperfect or thin-shelled egg.

Though pigeons make a general increase in a year, it does not arise from any quantity of eggs that they lay at one time, for they never lay more than two, and directly proceed to incubation, but from the frequency of the hatchings, which if they are good breeders, usually happens once in five or six weeks. After a pigeon has laid her first egg, she rests a day between, and on the following day lays another: it is customary for them to stand over the first egg, which is termed irregular incubation,

bation, till the second is laid, and then sit close, that both young ones may be hatched nearly at once: though some will sit close on the first, and by that means bring forth a day or two sooner than the other. During the time of a pigeon's incubation, the trouble is equally divided between the cock and hen, as has already been observed. But at the end of nineteen days if the eggs be not hatched, they should be examined, and if addled taken away, as their continuing to sit longer, not only causes a delay in their further propagation, but does great injury to the bird.*

* These birds are very fond of heat, and they prefer the burning climates of the tropics to the temperate countries. Those countries which are near the poles, are without pigeons; and those which are found wild in cold countries emigrate, at the approach of winter, to warmer ones. Hence pigeons are common, numerous, and greatly multiplied, in the tropical regions.

THE LAND RAIL.

THIS bird weighs about six or seven ounces, and is from the point of each wing, when extended, about nineteen or twenty inches. The bill is about an inch long, and very much resembles that of a water-hen ; the under mandible is of a dusky colour, the upper more whitish. The body is narrow, and seems compressed on each side ; the chin, breast, and lower part of the belly, are white ; upon the head are two broad black lines, it has also a white line that passes from the shoulders, resembling that of a moor-hen ; the throat is of a sort of brown or dirty colour. The middle of the feathers on the back are black, but the sides are rather reddish or ash-coloured ; it has transverse white lines, running across the thighs. Some of the wing-feathers, especially the lesser rows, are of a deep yellow ; the tail
is

is about two inches long, the legs are bare of feathers above the knees, the feet of a whitish colour. It has a stalking gait, and is by the Italians called the great quail, or the king of quails, and is said to be the leader or guide of those birds, from one place to another. They are said to feed upon snails, worms, and all kinds of small insects.

They are rarely seen in England, but are very common in many parts of Ireland.

THE ATTAGEN.

THIS bird has a short black bill, hooked, and sharp at the end. The body is of various colours. The head is quite beautiful, and adorned with a fine tuft, or top-knot, of a brownish colour, chequered with black and white spots. It has black eyes, with a brown circle; and the skin of the eye-lid is scarlet. The throat, or underneath the bill, is covered with some very fine longish feathers, which hang down in the manner of a beard. It has a long neck, which, like the rest of the body, is slender and taper, of an ash-colour, and diversified with white and black spots. The foremost claws of the feet are pretty long, but the hindermost are shorter, and all of them are provided with sharp crooked talons.

What was the true attagen of the ancients is not precisely known. Alexander Myndius describes

describes it to be a little larger than a partridge, to be full of spots of different colours down the back ; of a reddish brown, with short wings, and a plump heavy body. But Gesner supposes it to have been the *Gallina Corylorum*, or mountain partridge. Bellonius thinks it was of the quail kind ; and Julius Alexandrinus relates, that he saw one that was brought from Spain, that had a longer neck and legs, and was not spotted in the same manner. One was seen at Florence, with a black bill, but reddish at the end ; black eyes, with an ash-coloured circle ; spotted with white on the belly ; of a reddish brown colour on the back, chequered with black spots ; and with dark brown feet. Aldrovandus says, that a bird was brought from the mountains in Sicily, and affirmed to be the true attagen, which in bigness, and almost every other particular, exactly resembled a pheasant ; their flesh is of a delicious taste.

They are reported to purge themselves with henbane ; for which reason, it is said, none are to be seen in countries which want that plant. They are found in some parts of Crete, and in Cyprus they are bred tame. But none can compare in goodness with those of Rhodes and Ionia. They are likewise to be met with in
the

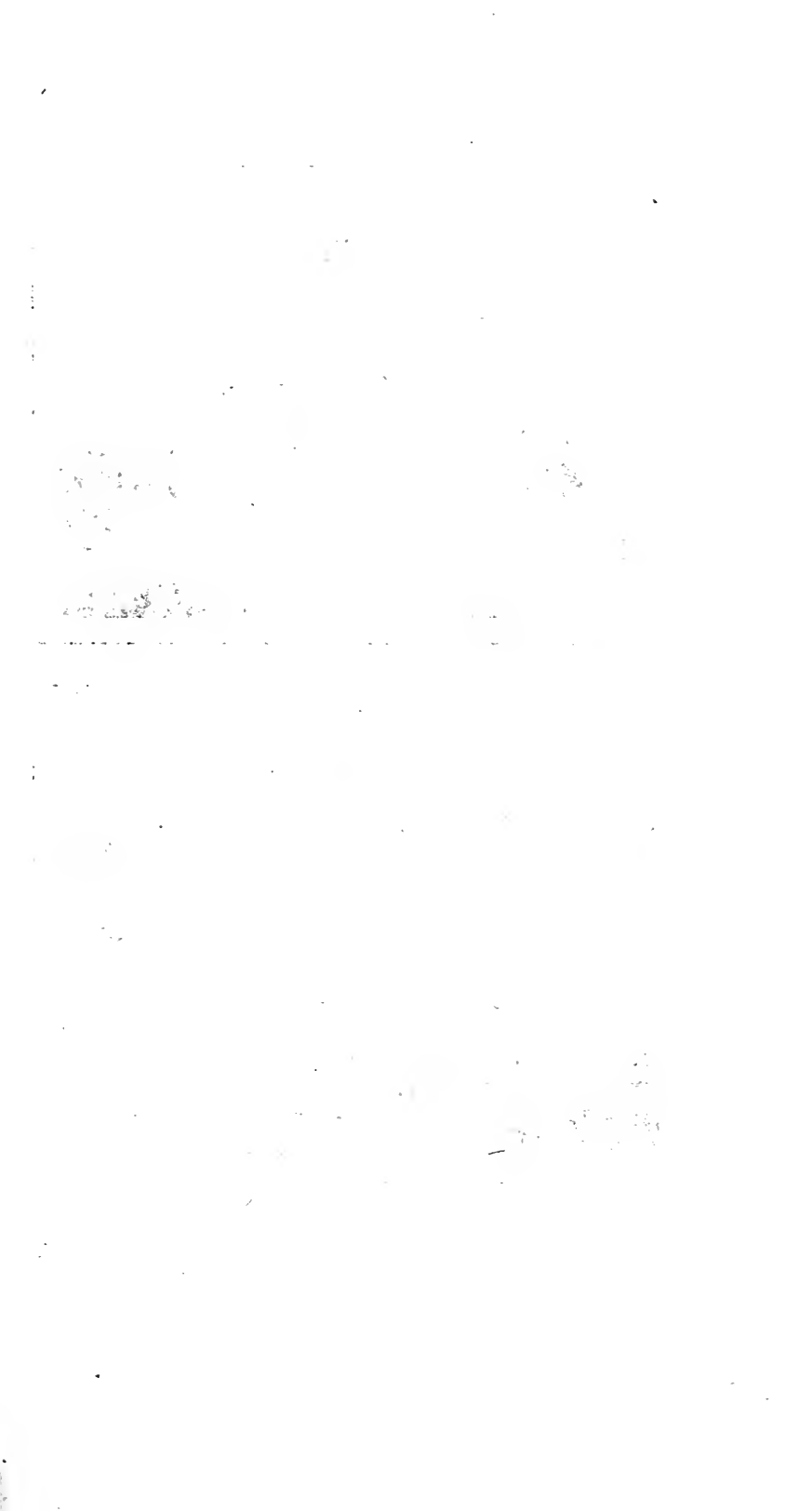




FIG. 69.

Brown Heron.



FIG. 70.

Flamingo.

the Pyrenean mountains on the side of Spain, in Auvergne, in France, and on the Alps.

They feed on all sorts of grain and fruits, and will call over their own name, as well as their voice will permit, and sing. But as Pliny and Ælian inform us, they lose their voice when taken; and what is equally remarkable, recover it again as soon as set at liberty.

OF THE HERON, CRANE, STORK, AND THEIR
AFFINITIES.

WE shall now proceed to a most extensive family of the feathered race, who, both in shape, habits, and manners, differ most materially from any of the tribes of which we have hitherto treated. In this, as well as the other tribes, nomenclators have taken much pains and trouble to put them into regular classes, in which the most arbitrary distributions have been adopted, and the most

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evident blunders been persisted in. For instance, we shall find the humming bird and the raven placed in the same family; and here it is hardly necessary to put the interrogatory, "What idea the European could form of the beautiful little animal who wantons in the solar beams, and whose splendor adorns the Asiatic scenes, if he were told it belongs to the same class as yonder carrion crow?" The same kind of palpable contradictions have been variously persisted in through every tribe, and in none more so than in those who come under the general denomination of the Water-fowl. Mr. Pennant, however, has made a distinction which we shall be inclined to follow in our arrangement of them; he divides them into three orders, those with cloven feet, as the crane kind; those with finned feet, as the snipe kind; and those with webbed feet, as the duck kind; this division, indeed, has some claims to be observed as correct, since those belonging to each part have general and distinct properties: for instance, the waders, or cloven-footed water-fowls are in general tall, light, and though with long tails and necks, yet well proportioned; while the web-footed are of a squat make, with a waddling gait; their

their legs placed far behind, and the length of their necks out of all proportion. Those with finned feet constitute, as it were, a middle race, being calculated both for swimming and wading, and partake of the nature of both. The cloven-footed lay their eggs on the ground, and make no nests. Those with pinnated feet form large nests in the water, or near it; and the web-footed fowl deposit their eggs sometimes on lofty cliffs, or inaccessible promontories, or else concealed in the rushes, bushes, &c. near the water. Of the general characteristics of this species a celebrated author has thus ably observed: “The progressions of Nature from one class of beings to another are always by slow and almost imperceptible degrees. She has peopled the woods and the fields with a variety of the most beautiful birds; and, to leave no part of her extensive territories untenanted, she has stocked the waters with its feathered inhabitants also; she has taken the same care in providing for the wants of her animals in this element, as she has done with respect to those of the other: she has used as much precaution to render water-fowl fit for swimming, as she did in forming land-fowl for flight; she has defended their feathers with a natural oil, and

“ united their toes by a webbed membrane ;
“ by which contrivances they have at once
“ security and motion. But between the
“ classes of land-birds that shun the water,
“ and of water-fowl that are made for swim-
“ ming and living on it, she has formed a
“ very numerous tribe of birds, that seem to
“ partake of a middle nature ; that, with
“ divided toes, seemingly fitted to live upon
“ land, are at the same time furnished with
“ appetites that chiefly attach them to the
“ waters. These can properly be called
“ neither land-birds nor water-fowl, as they
“ provide all their sustenance from watery
“ places, and yet are unqualified to seek it
“ in those depths where it is often found in
“ greatest plenty.

“ This class of birds, of the crane kind, are
“ to be distinguished from others rather by
“ their appetites than their conformation.
“ Yet even in this respect they seem to be
“ sufficiently discriminated by nature ; as
“ they are to live among the waters, yet are
“ incapable of swimming in them, most of
“ them have long legs, fitted for wading in
“ shallow waters, or long bills proper for
“ groping in them.

“ Every bird of this kind, habituated to
“ marshy places, may be known, if not by the
“ length

“ length of its legs, at least by the scaly sur-
“ face of them. Those who have observed
“ the legs of a snipe or a woodcock, will easily
“ perceive my meaning; and how different
“ the surface of the skin that covers them is
“ from that of the pigeon or the partridge.
“ Most birds of this kind also are bare of fea-
“ thers half way up the thigh; at least, in
“ all of them, above the knee. Their long
“ habits of wading in the waters, and having
“ their legs continually in moisture, prevent
“ the growth of feathers on those parts; so
“ that there is a surprising difference between
“ the leg of a crane naked of feathers almost
“ up to the body, and the falcon booted almost
“ to the very toes.

“ The bill also is very distinguishable in
“ most of this class. It is, in general, longer
“ than that of other birds, and in some finely
“ fluted on every side; while at the point it
“ is possessed of extreme sensibility, and fur-
“ nished with nerves for the better feeling
“ their food at the bottom of marshes, where
“ it cannot be seen. Some birds of this class
“ are thus fitted with every convenience;
“ they have long legs, for wading; long necks,
“ for stooping; long bills, for searching; and
“ nervous claws, for feeling. Others are not
“ so amply provided for; as some have long
“ bills,

“ bills, but legs of no great length; and
“ others have long necks, but very short legs.
“ It is a rule which universally holds, that
“ where the bird’s legs are long, the neck is
“ also long in proportion. It would indeed be
“ an incurable defect in the bird’s conforma-
“ tion, to be lifted upon stilts above its food,
“ without being furnished with an instrument
“ to reach it.

“ If we consider the natural power of this
“ class, in a comparative view, they will seem
“ rather inferior to those of every other tribe.
“ Their nests are more simple than those of
“ the sparrow; and their methods of obtain-
“ ing food less ingenious than those of the
“ falcon; the pie exceeds them in cunning;
“ and though they have all the voraciousness
“ of the poultry tribe, they want their fecun-
“ dity. None of this kind, therefore, have
“ been taken into man’s society, or under his
“ protection; they are neither caged like the
“ nightingale, nor kept tame like the turkey;
“ but lead a life of precarious liberty, in fens
“ and marshes, at the edges of lakes, and
“ along the sea shore. They all live upon
“ fish or insects, one or two only excepted;
“ even those that are called *mudsuckers*, such
“ as the snipe and the woodcock, it is more
“ than probable, grope the bottom of marshy
“ places

“ places only for such insects as are deposited
“ there by their kind, and live in a vermicular
“ state, in pools and plashes, till they take
“ wing, and become flying insects.

“ All this class, therefore, that are fed upon
“ insects, their food being easily digestible, are
“ good to be eaten; while those who live en-
“ tirely upon fish, abounding in oil, acquire in
“ their flesh the rancidity of their diet, and
“ are, in general, unfit for our tables. To sa-
“ vages, indeed, and sailors on a long voyage,
“ every thing that has life seems good to be
“ eaten; and we often find them recommend-
“ ing those animals as dainties, which they
“ themselves would spurn at, after a course of
“ good living. Nothing is more common in
“ their journals than such accounts as these—
“ ‘This day we shot a fox—pretty good eat-
“ ing; this day we shot a heron—pretty good
“ eating; and this day we killed a turtle,
“ (which they rank with the heron and the
“ fox) as pretty good eating.’ Their ac-
“ counts, therefore, of the flesh of these birds
“ are not to be depended upon; and when
“ they cry up the heron or the stork of other
“ countries as luxurious food, we must al-
“ ways attend to the state of their appetites,
“ who give the character.”

Such

Such are the general observations made upon this race, and which are applicable to almost the whole, notwithstanding it is divided into such numerous branches. It is true, indeed, that if we simply look upon the heron and the swan, we shall be led, by their figures, to determine that no two birds can be more opposite; in some of their manners and habits they are also very different, particularly as the one is in the constant practice of sailing on the bosom of the air, while the other is as invariably swimming on the water; but they nevertheless possess sufficient analogies to induce us to follow the general custom of ranking them all in one extensive family.

THE HERON.

THE *Crane*, *Stork*, and *Heron*, together with all their varieties, bear a very strong affinity to each other; and their differences are not easily discernible. The crane and stork differ rather in their nature and internal conformation than in their external figure; but still they are distinguishable, as well by their colour as by the claws of the stork, which are very peculiar, and more resembling a man's nails than the claws of a bird. The heron may be distinguished from both, by its size, which is much less, and by its bill, which is much longer in proportion; and also more particularly the middle claw on each foot, which is toothed like a saw, for the better seizing and holding its slippery prey. The heron differs also from all of the feathered race, in having but one cæcum, whereas other birds have two.

Brisson has enumerated no less than forty-seven varieties of the heron, and Latham has extended them to eighty two, all differing in their size, figure, and plumage, and with talents adapted to their place of residence, or their peculiar pursuits. But how various soever the heron kind may be in their colours or their bills, they all seem possessed of the same manners, and have but one character of cowardice and rapacity, indolence, and insatiable hunger. Other birds, say all naturalists, are found to grow fat by an abundant supply of food; but these, though excessively destructive and voracious, are always found to have lean and carrion bodies, as if not even plenty were sufficient for their support.

The common heron is remarkably light, in proportion to its bulk, scarcely weighing three pounds and a half, yet it expands a breadth of wing which is five feet from tip to tip. Its bill is very long, being five inches from the point to the base; its claws are long, sharp, and the middlemost toothed like a saw. Yet, thus armed, it is indolent and cowardly, and even flies at the approach of a sparrow-hawk. Goldsmith observes, that it was once the amusement of the great to pursue this timorous creature with the falcon; and heron
hawking

hawking was so favourite a diversion among our ancestors, that laws were enacted for the preservation of the species; and the person who destroyed their eggs was liable to a penalty of twenty shillings for each offence. At present, however, the defects of the ill-judged policy of our ancestors is felt by their posterity; for, as the amusement of hawking has given place to the more useful methods of stocking fish-ponds, the heron is now become a most formidable enemy.

Of all birds, this commits the greatest devastation in fresh waters: and there is scarcely a fish, though ever so large, that he will not strike at and wound, though unable to carry it away. But the smaller fry are his chief subsistence; these, pursued by their large fellows of the deep, are obliged to take refuge in shallow waters, where they find the heron, a still more formidable enemy. His method is to wade as far as he can go into the water, and there patiently wait the approach of his prey, which, when it comes within sight, he darts upon with inevitable aim. In this manner he is found to destroy more in a week than an otter in three months. “I have seen
“a heron,” says Willoughby, “that had
“been shot, that had seventeen carp in his

“belly at once, which he will digest in six
“or seven hours, and then to fishing again.
“I have seen a carp,” continues he, “taken
“out of a heron’s belly, nine inches and a half
“long. Several gentlemen who kept tame
“herons, to try what quantity one of them
“would eat in a day, have put several smaller
“roach and dace in a tub; and they have
“found him eat fifty in a day, one day with
“another. In this manner a single heron will
“destroy fifteen thousand carp in one half
“year.”

In general, the heron may be seen taking his gloomy stand by the lake side, as if meditating mischief, motionless and gorged with plunder. His usual attitude on this occasion is to sink his long neck between his shoulders, and keep his head turned on one side, as if eyeing the pool more intently. When the call of hunger returns, the toil of an hour or two is commonly sufficient to fill his capacious stomach; and he retires long before night to his retreat in the woods. Early in the morning, however, he is seen assiduous at his usual occupation.

In fine weather, the heron can always find a plentiful supply, but in cold and stormy seasons, his prey is no longer within reach; the
fish

fish that in the first case come into the shallow water, then keep in the deep as they find it to be the warmest situation. Frogs and lizards also seldom venture from their lurking places; and the heron is obliged to support himself upon his long habits of patience, and even to take up with the weeds that grow upon the water. At those times he contracts a consumptive disposition, which succeeding plenty is not able to remove: so that the meagre glutton spends his time between want and riot, and feels alternately the extremes of famine and excess.* Hence, notwithstanding the care with which he takes his prey, and the amazing quantity he devours, the heron is always lean and emaciated; and though his crop is usually found full, yet his flesh is scarcely sufficient to cover the bones.

Though the heron usually takes his prey by wading into the water, yet he sometimes takes it upon the wing. Much of his fishing indeed is performed in this manner; but

* The heron presents the image of a suffering, anxious, and indigent life; he passes hours, and whole days in the same spot, so immoveable, that he hardly appears to be a living creature. When seen through a telescope, for he will not permit a near approach, he appears as if he were asleep, placed upon a stone, the body almost upright, and resting upon one leg.

but he never hovers over deep waters, because there his prey is enabled to escape him by sinking to the bottom. In shallow places he darts with more certainty; for though the fish at sight of its enemy instantly descends, yet the heron, with his long bill and legs, immediately pins it to the bottom, and thus seizes it securely. In this manner, after having been seen with its long neck for above a minute under water, he rises upon the wing, with a trout or an eel struggling in his bill to get free. The greedy bird, however, flies to the shore, scarcely gives it time to expire, but swallows it whole, and then returns to fishing as before.

As this bird does incredible mischief to ponds newly stocked, Willoughby has suggested a method for taking him. “ Having
“ found his haunt, get three or four small
“ roach or dace, and having provided a strong
“ hook with a wire to it, this is drawn just
“ within side the skin of the fish, beginning
“ without side the gills, and running it to the
“ tail, by which the fish will not be killed,
“ but continue for five or six days alive. Then
“ having a strong line made of silk and wire,
“ about two yards and a half long, it is tied
“ to a stone at one end, the fish with the hook
“ being

“ being suffered to swim about at the other.
“ This being properly disposed in shallow
“ water, the heron will seize upon the fish to
“ its own destruction. From this method
“ we may learn that the fish must be alive,
“ otherwise the heron will not touch them,
“ and that this bird, as well as all those that
“ feed upon fish, must be its own caterer ; for
“ they will not prey upon such as die natu-
“ rally, or are killed by others before them.”

Though this bird lives chiefly among pools and marshes, yet its nest is built on the tops of the highest trees, and sometimes on cliffs hanging over the sea. They are never in flocks when they fish, but commit their depredations in solitude and silence ; but in making their nests they love each other's society ; and they are seen, like rooks, building in company with flocks of their kind. Their nests are made of sticks, and lined with wool ; and the female lays four large eggs of a pale green colour. The observable indolence of their nature, however, is not less seen in their nestling than in their habits of depredation. Nothing is more certain than that they will not be at the trouble of building a nest when they can get one already provided for them, that has been made by the rook, or deserted by

by the owl. This they usually enlarge and line within, driving off the original possessors should they happen to renew their claims.

The French avail themselves of the indolence of this bird, and provide a place with materials fitted for their nestlings, which they call *heronries*. The heron, though considered by the English as unfit for the table, is sought for in France, where the flesh of the young ones is in particular estimation. It is therefore for the purpose of procuring them with more ease, that they raise up high sheds along some fishy stream; and furnishing them with materials, the herons nestle, build, and breed there in great abundance. As soon as the young ones are supposed to be fit, the owner of the heronry takes, and carries off, such as are proper for eating; and these are sold for a very good price to the neighbouring gentry. "These are a delicacy which," says Buffon, "the French are very fond of, but which strangers have not yet been taught to relish as they ought." Nevertheless it was formerly esteemed as a food in England, and made a favourite dish at great tables. It was then said that the flesh of a heron was a dish for a king; at present, nothing about the house will touch it but a cat.

The

The herons, therefore, not being considered as worth the trouble of pursuing in any manner, are seldom sought after, or disturbed in their retreats, which, excepting when in search for prey, are commonly in almost inaccessible heights. Their nests are often found in great numbers in the middle of large forests, and in some groves nearer home, where the owners have a predilection for the bird, and do not chuse to drive it from its accustomed habitations. It is certain, that, by their cries, their expansive wings, their bulk, and wavy motion, they add no small variety to the forest, and solemnity to the scene.

When the young are hatched, as they are numerous, voracious, and importunate, the old ones are for ever upon the wing to provide them with sustenance. The quantity of fish they take upon this occasion is amazing, and their size is not less to be wondered at. Of their assiduity in providing for their young, an instance is given of a heron's nest that was built near a school-house, to which some of the boys climbed up, took down the young ones, sewed up the vent, and laid them in the nest as before. The pain the poor little animals felt from the operation increased their cries; and this but served to increase the diligence of the old ones in enlarging their

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supply. Thus they heaped the nest with various sorts of fish, and the best of their kind ; and as their young screamed, they flew off for more. The boys gathered up the fish, which the young ones were incapable of eating, till the old ones at last quitted their nest, and gave up their brood, whose cravings they found it impossible to satisfy.

The heron is said to be a very long-lived bird ; according to Keysler it may exceed 60 years ; and by a recent instance of one that was taken in Holland, by a hawk belonging to the Stadtholder, its longevity is again confirmed, the bird having a silver plate fastened to one leg, with an inscription, importing, that it had been struck by the Elector of Cologne's hawks 35 years before.

That which is called the *Brown Heron* has the upper part of the head, neck, and back, and also the sides of the wings, of a dark ash colour ; the scapular feathers have generally white tips, with a sort of black stroke on each side of the wings, the quill feathers of a more dark colour, very much inclining to black, except the extreme edges, which are white ; the breast, neck, and upper part of the belly, are of a pale white, sprinkled with black ; the lower part of the belly darkish ash, and the thighs of a yellowish cast ; the tail is a
dark

dark ash, and the extreme feathers six or seven inches long.

The *Blue Heron* is about the size of the common one, and is supposed to weigh upwards of three pounds; it is about a yard from the tip of the bill to the end of the toes; the bill is in size and colour much the same as the former, only the upper part is a little hooked at the point. It has a fine crest of feathers on the top of the head, which appears of a blueish sky colour; the side of the head from the bill, and under part of the eyes, are white, the covert and scapular feathers of the wings are of a pale blue, the quill feathers black, with their outmost edges blue; the rest of the body is of a blueish sort of lead colour; it has yellowish feet, with very long toes, and the middle claw cerated. This is a curious and very uncommon bird.

The *Soco*, a Brazilian bird, seems in every respect to resemble the heron. It is about the size of the lesser heron, and has a short tail; the feathers on the head and neck are of a brownish colour, sprinkled with black spots, as are also those on the belly; but those under the wings are varied black and white.

Leo Africanus gives an account of a fowl which, by his description, very much resembles this, only its bill, neck, and legs are

somewhat shorter; in flying up, he says it mounts out of sight, but descends with a jerk when it spies a dead carcase; it lives very long; nay, many of this kind live till age bereaves them of all their feathers, upon which they return to their nest, and are nourished by the younger birds. They nestle upon high rocks, and the tops of unfrequented mountains, especially upon mount Atlas, where those who are acquainted with such places come and take them. The Italians have taken it for a bird of prey, but this author seems of another mind.*

* The heron catches a great many frogs, which he swallows whole; they may be discovered in their excrements with their bones unbroken, and surrounded with a sort of viscous mucilage of a green colour, formed, apparently, by the skins of the frogs: its excrements, like those of most water-fowl, have a burning quality with regard to grass, &c. When very hungry, he swallows small plants, &c. but its usual food is fish.

THE BITTERN.*

SOLEMN and dreary as, in an evening, may appear the various notes of the secluded inhabitants of the banks of unfrequented rivers, whether we consider the loud scream of the wild goose, the croaking of the mallard, the whining of the lapwing, or the tremulous neighing of the jack snipe, there is none so dismally hollow as the booming of the bittern. It is impossible for words to convey an adequate idea of its solemnity to those who have not heard this evening call. It is like the interrupted bellowing of a bull, but more hollow and louder, and is heard at a mile's distance, as if issued from some formidable being that resided at the bottom of the waters.

The bird, however, that produces this terrifying sound is not so big as a heron, with a weaker

* The name *asterias*, or *stellaris*, which the ancients gave to the bittern, is derived, according to Scaliger, from his evening flight straight towards the heavens, and in which he seems to lose himself beneath the starry firmament. Others derive it from the spots with which its plumage is covered.

weaker bill, and not above four inches long. It differs from the heron chiefly in its colour, which is in general of a palish yellow, spotted and barred with black. Its wind-pipe is fitted to produce the sound for which it is remarkable; the lower part of it, dividing into the lungs, being supplied with a thin loose membrane, that can be filled with a large body of air, and exploded at pleasure. These bellowing explosions are chiefly heard from the beginning of spring to the end of autumn; and, however awful they may seem to us, they are the calls to courtship or connubial felicity.

This bird, though of the heron kind, is yet neither so destructive nor so voracious. It is a retired timorous animal, concealing itself in the midst of reeds and marshy places, and living upon frogs, insects, and vegetables; and though so similar to the heron in figure, yet differing much in manners and appetites. It lays its eggs in sedgy margin, or amidst a tuft of rushes, and composes its simple habitation of sedges, the leaves of water-plants, and dry rushes. It lays generally seven or eight eggs of an ash-green colour, and in three days leads its little ones to ther food.

The flesh of the bittern is in great esteem among the luxurious. For this reason it is as eagerly sought after by the fowler, as it is
shunned

shunned by the peasant; and as it is a heavy-rising, slow-winged bird, it does not often escape him. Indeed, it seldom rises but when almost trod upon; and seems to seek protection rather from concealment than flight. At the latter end of autumn, however, in the evening, its wonted indolence appears to forsake it. It is then seen rising in a spiral ascent till it is quite lost from the view, and makes, at the same time, a singular noise very different from its former boomings.

The heron is lean and cadaverous, subsisting chiefly upon animal food; the bittern is plump and fleshy, as it feeds upon vegetables, when more nourishing food is wanting. It cannot, therefore, be from its voracious appetites, but its hollow boom, that the bittern is held in such detestation by the common people, many of whom entertain the opinion that it make use of some external instrument to produce so tremendous a sound, and positively assert that the bird thrusts its bill into a reed that serves as a pipe for swelling the note above its natural pitch; while others, and in this number we find Thomson, the poet, imagine that the bittern puts its head under water, and then violently blowing, produces its boomings ;

ings;* but the fact is, that the bird, as already observed, is sufficiently provided by nature for this call, and is often heard where there are neither reeds nor waters to assist its sonorous invitations. By whatever cause the booming is made, it has been the means of rendering the bittern a terror to the peasant, and enabled him frequently to put a whole hamlet into a lamentable consternation.

“ I remember (says a modern author), in the
“ place where I was a boy, with what terror
“ this bird’s note affected the whole village ;
“ they considered it as the presage of some
“ bad event ; and generally found or made one
“ to succeed it. I do not speak ludicrously :
“ but if any person in the neighbourhood died,
“ they supposed it could not be otherwise, for
“ the night raven had foretold it; but if no-
“ body happened to die, the death of a cow or a
“ sheep gave completion to the prophecy.”

* In the following passage from Spring :

“ As yet the trembling year is unconfirm’d,
“ And winter oft at eve resumes the breeze,
“ Chills the pale morn, and bids his driving sleets
“ Deform the day delightless ; so that scarce
“ The bittern knows his time, *with bill engulph’d*,
“ To shake the sounding marsh, &c.”

THE CRANE.

AUTHORS differ very much with respect to the size and dimensions of this bird. Willoughby and Pennant state him to be from five to six feet long, from the tip of the tail to the beak. Other accounts say, that he is above five feet high ; and others, that he is as tall as a man ; but it is very difficult to suppose that a bird, the body of which is not larger than that of a turkey hen, and acknowledged on all hands not to weigh above ten pounds, can be almost as long as an ostrich. Brisson, however, seems to give this bird its real dimensions, when he describes it as something less than the brown stork, about three feet high, and about four from the tip to the tail. Still, however, the numerous testimonies of its superior size are not to be totally rejected ; and perhaps, that from which Brisson took his dimensions, was one of the smallest of the kind.

According to Brisson then, the crane measures three feet four inches from the tip of the

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beak to the end of the tail, and four feet from the head to the toe. It is a tall, slender bird, with a long neck and long legs. The top of the head is covered with black bristles, and the back of it is bald and red, which sufficiently distinguishes the crane from the stork, to which it is very nearly allied in size and figure. The plumage, in general, is ash-coloured; and there are two large tufts of feathers that spring from the pinion of each wing. These bear a resemblance to hair, and are finely curled at the ends, which the bird has a power of erecting and depressing at pleasure. Gesner says, that in his time these feathers used to be set in gold, and worn as ornaments in the caps of the great.

The crane is a bird with which all the ancient writers are familiar; and, in describing it, they have not failed to mix fable with history. From the policy of the cranes, say they, we may draw an idea of the most perfect republic amongst ourselves: from their tenderness to their decrepid parents, which they take care to nourish, to cherish, and support when flying, we may learn lessons of filial piety; and from their conduct in fighting with the pigmies of Ethiopia, we may imbibe the most useful maxims in the art of war. In
early

early times, the history of Nature fell to the lot of poets, and though certainly none could then describe it so well, yet it was a part of their province to embellish also; therefore, when this agreeable science was first undertaken by the historic naturalist, he was obliged to take many accounts as he found them; and thus it was that, in a variety of instances, fable has come down to posterity blended with truth.

In the surprising peculiarities, therefore, which have been attributed to the crane, there is some foundation of truth; yet much more has been added by fancy. The crane is certainly a very social bird, for they are seldom seen alone. Their usual method of flying or sitting, is in flocks of fifty or sixty together; and while a part feed, the rest stand like centinels upon duty.

The various fables of their supporting their aged parents may have arisen from their strict connubial affection;* and as for their fight-

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* It is at the sources of the Nile where the ancients supposed these battles to be fought. "The pigmies," says Aristotle, "are a sort of little men mounted on little horses, and who live in caverns." Pliny arms these little men with arrows and makes them ride upon goats; descending in spring from the mountains of India, where they live under a serene sky, to come and make war against the cranes, break their eggs, and carry away their little ones.

ing with the pigmies, it may not be improbable that they have boldly withstood the invasions of monkeys coming to rob their nests; for, in this case, as the crane lives upon vegetables, it is not probable that it would be the first aggressor.

However this be, the crane is a wandering sociable bird, that, for the most part, subsists upon vegetables; and is known in every country of Europe, except our own. There is no part of the world, says Belon, where the fields are cultivated, that the crane does not come in with the husbandman for a share in the harvest. As they are birds of passage, they are seen to depart and return regularly at those seasons when their provision invites or repels them. They generally leave Europe about the latter end of autumn, and return in the beginning of summer. In the inland parts of the continent, they are seen crossing the country in flocks of fifty or a hundred together, making from the northern regions towards the south.

In these migrations, however, they are not so resolutely bent upon going forward, but that if a field of corn offers in their way, they will stop awhile to regale upon it: upon such occasions they do incredible damage, chiefly in the night; and the husbandman, who lies
down

down in joyful expectation of a plentiful harvest, rises in the morning to see his fields laid entirely waste by an enemy, whose march is too swift for his vengeance to overtake.

England is now free from their visits; not but that they were formerly known in this island, and held in great estimation for the delicacy of their flesh: there was even a penalty enacted against destroying their eggs; but, at present they do not extend their excursions so far. Cultivation and population, as we have had frequent occasion to remark, go hand in hand; and though our fields may offer them a greater plenty, yet they are so guarded, that the cranes have clearly considered that the hazard exceeded the advantage; and by which determination we are certainly benefited, for whatever their flesh might once have been, when, as Plutarch tells us, cranes were blinded and kept in coops, to be fattened for the tables of the great in Rome; or, as they were brought up, stuffed with mint and rue, to the tables of our nobles at home; at present they are considered all over Europe as wretched eating. The flesh is fibrous and dry, requiring much preparation to make it palatable; and even after every art, it is fit only for the stomachs of strong and labouring people.

The

The cold region seems to be this bird's favourite abode.* They come down into the more southern parts of Europe, rather as visitants than inhabitants: yet it is not well known in what manner they portion out their time, to the different parts of the world. The migrations of the field-fare and thrush are obvious and well known: they go northward or southward, in one simple track; when their food fails them here, they have but one region to go to. But it is otherwise with the crane; he changes place, like a wanderer: he spends his autumn in Europe; he then flies off, probably to some more southern climate, to enjoy a part of the winter; returns to Europe in the spring; crosses up to the north in summer; visits those lakes that are never dry; and then comes down again, to make depredations upon our cultivated grounds, in autumn. Thus, Gesner assures us, the cranes usually begin to quit Germany, from about the eleventh of September, to the seventeenth of October; thence they are seen flying southward by thousands; and Redi tells us, that they arrive in Tuscany a short time after. There they

* Struck by the continual migrations of this bird, the ancients called it equally the bird of Lybia and the bird of Scythia.

they tear up the fields newly sown, and do great mischief. It is to be supposed that, in the severity of winter, they go southward, still nearer the line. They again appear in the fields of Pisa, regularly about the twentieth of February to anticipate the spring.

When they set out on these journies, they ascend to amazing heights, and so continue during their flight. Their note is the loudest of all other birds; and is often heard descending from the clouds, when the bird itself is entirely unseen. As it is light for its size, and spreads a large expanse of wing, it is capable of floating at the greatest height, where the air is lightest; and as it secures its safety, and is entirely out of the reach of man, it flies in tracks which it would be too fatiguing for any other bird to move forward in.

Though unseen themselves in these aerial journies, they are supposed to have the most distinct vision of every object below. They govern and direct their flight by their cries; and exhort each other to proceed or to descend, when a fit opportunity offers for depredation. Their voice, as we have observed, is the loudest of all the feathered tribe; and its peculiar clangor arises from the very extraordinary length and contortion of the wind-pipe.

pipe. In quadrupeds, the windpipe is short, and the glottis, or cartilages that form the voice, are at that end of it which is next the mouth: in water fowl, the windpipe is longer, but the cartilages that form the voice are at the other end, which lies down to their belly. By this means they have much louder voices, in proportion to their size, than any other animal whatever; for the note, when formed below, is reverberated through all the rings of the windpipe, till it reaches the air. But the voice of the duck or the goose, is nothing to be compared to that of the crane, whose windpipe is not only made in the same manner with theirs, but is above twenty times as long. Nature seems to have bestowed much pains in lengthening out this organ. From the outside, it enters through the flesh into the breast-bone, which has a great cavity within to receive it. There, being thrice reflected, it goes out again at the same hole, and so turns down to the lungs, and thus enters the body a second time. The loud clangorous sound which the bird is thus enabled to produce is, when near, almost, deafening. It is, however, particularly serviceable to the animal, either during their migrations, or while they remain in the same place: by it the flock is encouraged
in

in their journies; and if, while they are feeding, which is usually performed in profound silence, they are invaded on any side, the bird that first perceives the danger, is sure to sound the alarm, and all are speedily upon the wing.

As they rise but heavily, they are very shy birds, and seldom let the fowler approach them. Their depredations are generally made in the darkest nights; at which time they enter into a field of corn, and trample it down, as if it had been crossed over by a regiment of soldiers. On other occasions, they cross some extensive solitary marsh, where they range themselves all day, as if they were in deliberation; and not having that grain which is most to their appetites, wade the marshes for insects and other food, which they can procure with less danger.

Corn is their favourite food; but there is scarcely any which they do not eat. Redi, who opened several, found the stomach of one full of the herb called *dandelion*; that of another was filled with beans; a third had a great quantity of clover in its stomach; while that of two others was filled with earth-worms and beetles; in some he found lizards and sea-fish; in others, snails, grass, and pebbles, swallowed perhaps for medicinal purposes. From which

it plainly appears that these birds can be at no loss to obtain a necessary supply, although corn-fields may be their most favourite scenes of plunder.

In general it is a peaceable bird, both in its own society, and with respect to those of the forest. Though so large in appearance, a small falcon will pursue, attack, and often disable it. The method is, with those who are fond of hawking, to fly several hawks together against it, which the crane endeavours to avoid, by flying up perpendicularly, till the air becomes too thin to support it any higher. The hawk, however, still bears it company; and though less fitted for floating in so thin a medium, yet, possessed of greater rapidity, it still gains the ascendancy. They both often rise out of sight; but soon the spectator, who keeps his eye fixed above, perceives them like two specks, beginning to appear; they gather on his eye for a little space, and shortly after come tumbling perpendicularly together, with great animosity, on the side of the hawk, and a loud screaming on that of the crane. Thus driven to extremity, and unable to fly, the poor animal throws itself upon its back, and in that situation makes a most desperate defence, till the sportsman

sportsman coming up, generally puts an end to the contest with its life.

It was once the custom to breed up cranes to be thus baited; and young ones were taken from the nest, to be trained up for this cruel diversion. It is an animal easily tamed; and, if we can believe Albertus Magnus, has a particular affection for man. This quality, however, was not sufficient to guard it from being made the victim of his fierce amusements. The female is easily distinguished from the male, by not being bald behind: she never lays above two eggs at a time, and which are like those of a goose, but of a bluish colour. The young ones are soon fit to fly, and then the parents forsake them to shift for themselves; but before this time they are led forth to the places where their food is most easily found. Though then unfledged, they run with such swiftness that a man cannot easily overtake them. We are told, that as they grow old, their plumage becomes darker; and as a proof of their longevity, Aldrovandus asserts, that a friend of his kept one tame for above forty years.

Whatever may have been the disposition of the great, the common people of every country, to this day, bear the crane a compassionate

regard. It is possible the ancient prejudices in its favour, which once having been planted are eradicated but slowly, may still continue to operate. In some countries it is considered as an heinous offence to kill a crane; and though the legislature declines to punish, yet the people do not fail to resent the injury. The crane they, in some measure, consider as the prophet of the season: upon its approach or delay they regulate the periods of their rural economy. If he comes early in the season they expect a plentiful summer; and if slow in his visits, they then prepare for an unfavourable harvest.

The *Egret* is of the crane kind, but only one species is known in Europe, which is called the *little egret*. It is the size of a fowl. The back part of the head is crested, and two of the feathers, which are five inches in length, hang gracefully behind. The whole plumage is of a beautiful white, and the elegance of the bird is much increased by the long loose feathers which cover and hang over the rump; their flesh is said to be excellent. It is conjectured, that both the crane and egret were formerly inhabitants of Great Britain; but this can hardly be said of them at present, notwithstanding a solitary instance or two of
their

their having been shot there. In America there are egrets found of a black colour; but they differ in no other respect from the European.

THE STORK.

CONSIDERING the stork merely with regard to its external figure, we should be very apt to confound it with the crane; for it is of the same size, it has the same formation as to the bill, neck, legs, and body, except that it is somewhat more corpulent. Its differences are but very slight; such as the colour, which in the crane is ash and black, but in the stork is white and brown. The nails of the toes of the stork also are very peculiar, not being clawed like those of other birds, but flat like the nails of a man.

These, however, are but very slight differences; and its true distinctions are to be taken rather from its manners than its form. The crane has a loud piercing voice; the stork is
silent,

silent, and produces no other noise than the clacking of its under chap against the upper: the crane has a strange convolution of the wind-pipe through the breast bone; the stork's is formed in the usual manner: the crane feeds mostly upon vegetables and grain, the stork preys entirely upon frogs, fishes, birds, and serpents; the crane avoids towns and populous places; the stork always lives in or near them; the crane lays but two eggs, and the stork generally four. These are distinctions fully sufficient to discriminate the species, notwithstanding the similitude of their form.

Storks are birds of passage, like the former; but it is hard to say whence they come, or whither they go. When they withdraw from Europe, they all assemble on a particular day, and never leave one of their company behind them. They take their flight in the night, which is the reason that their course has never been accurately observed. They generally return into Europe in the middle of March, and make their nests on the tops of chimnies and houses as well as of high trees. The females lay from two to four eggs, of the size and colour of those of geese, and the male and female sit upon them by turns. They
are

are a month in hatching; and when their young are excluded, they are particularly solicitous for their safety.

As the food of these birds consists in a great measure of frogs and serpents, it is not to be wondered at that different nations have paid them a particular veneration. The Dutch are very solicitous for the preservation of the stork in every part of their republic. This bird seems to have taken refuge among their towns; and builds on the tops of their houses without any molestation. It is seen resting familiarly in the streets, and protected as well by the laws as the prejudices of the people. They have even got an opinion, that it will only live in a republic; and that story of filial piety, first falsely propagated of the crane, has in part been ascribed to the stork. But it is not in republics alone that the stork is seen to reside, as there are few towns on the continent, in low marshy situations, but have the stork as an inmate among them; whether under the despotic princes of Germany, or the republics of Italy.

The stork seems a general favourite even among the moderns; but with the ancient Egyptians their regard was carried even to adoration. This enlightened people who worshipped

shipped the Deity in his creatures, paid divine honours to the ibis, as is universally known. It has been usually supposed that the ancient ibis is the same with that which goes at present by the same name ; a bird of the stork kind, of about the size of a curlew, all over black, with a bill very thick in the beginning, but ending in a point for the better seizing its prey, which is caterpillars, locusts, and serpents. But, however useful the modern ibis may be in ridding Egypt, where it resides, of the vermin and venomous animals that infest it, yet it is much doubted whether this be the same ibis to which the ancients paid their adoration. Maillet, the French consul at Cairo, observes that it is very hard to determine what bird the ancient ibis certainly was, because there are cranes, storks, hawks, kites, and falcons, that are all equally enemies to serpents, and devour a vast number. He farther adds, that in the month of May, when the winds begin to blow from the internal parts of Africa, there are several sorts of birds that come down from Upper Egypt, whence they are driven by the rains, in search of a better habitation, and that it is then they do this country such signal services. Nor does the figure of this bird, hieroglyphically represented on their pillars, mark it

it sufficiently to make the distinction. Besides, the modern ibis is not peculiar to Egypt, as it is to be seen but at certain seasons of the year; whereas we are informed by Pliny, that this bird was seen no where else. It is thought, therefore, that the true ibis is a bird of the vulture kind, described above, and called by some the *capon of Pharoah*, which is not only a devourer of serpents, but will follow the caravans that go to Mecca, to feed upon the offal of the animals that are killed on the journey.

Indeed, there are other authors who describe the Egyptian ibis to be much larger than the stork, measuring from thirty to forty inches in length; that its bill is near seven inches long, slightly curved, and ends in a blunt point; that its plumage is of a reddish white, mostly inclining to black or red on the wings and back; and those authors state that they are found in great number in Lower Egypt, especially in those places just freed from the inundations of the Nile, and where they are of great service, in destroying insects, reptiles, &c.

There is another kind, called the *Black-faced Ibis*, which does not exceed twenty-

eight inches in length. The whole face of this, quite beyond the eyes, is bare of feathers, black and warty, and under the chin hangs a loose, wrinkled skin, forming a pouch. The head, neck, and breast, are yellow, with a bar of ash-colour across the latter; the rest of the body is ash-colour. It was found on New Year's Island, near Staten Island.*

* The stork does not lay more than four eggs, and often only two: they are a dirty white, or yellowish colour, a little smaller, but more elongated than those of a goose. The male covers them during the time that the female seeks for pasture. The eggs are hatched at the end of about a month; the father and mother redouble then their activity to carry nourishment to their young, who receive it with a sort of hissing noise. They are never both absent from the nest together; and while one is foraging, the other may be seen standing upon one leg near the nest, looking towards the little ones.

OF THE BALEARIC AND OTHER CRANES.

PLINY has described a bird of the crane kind, with a topping resembling that of the green wood-pecker. This bird continued unknown among the moderns until they became acquainted with the birds of the tropical climates, when one of the crane kind with a topping was brought into Europe, and described by Aldrovandus as Pliny's Balearic Crane. Hence these birds, which have since been brought from Africa and the East in numbers, have received the name of Balearic Cranes, but without any just foundation. The real Balearic Crane of Pliny seems to be the lesser ash-coloured heron, with a topping of narrow white feathers, or perhaps the egret,

S s 2

with

with two long feathers that fall back from the sides of the head. The bird that we are about to describe under the name of the Balearic Crane, was unknown to the ancients ; and the heron or egret ought to be reinstated in its just title to that name.

No bird presents to the eye a more whimsical figure than this, which is universally called the Balearic Crane. It is pretty nearly the shape and size of the ordinary crane, with long legs and a long neck ; but the bill is shorter, and the colour of the feathers of a dark greenish grey. The head and throat form the most striking part of this bird's figure. On the head is seen standing up, a thick round crest, made of bristles, spreading every way, and resembling rays diverging in different directions. The longest of these rays is about three inches and a half ; and they are all topped with a kind of black tassels, which give them a beautiful appearance. The sides of the head and cheeks are bare, whitish, and edged with red, while underneath the throat hangs a kind of bag or wattle, like that of a cock, but not divided into two. To give this odd composition a higher finishing, the eye is large and staring ; the pupil black .
and

and big, surrounded with a gold-coloured iris, that completes the bird's very singular appearance.

From such a peculiar figure, we might be led to wish for a minute history of its manners; but of these we can give but slight information. It comes from the coast of Africa, and the Cape Verd Islands: When running, it stretches out its wings, and goes very swiftly, otherwise its usual motion is very slow. In their domestic state, they walk very deliberately among other poultry, and suffer themselves to be approached by every spectator. They never roost in houses; but about night, when they are disposed to go to rest, they search out some high wall, on which they perch in the manner of a peacock. Indeed they so much resemble that bird in manners and disposition, that some have described them by the name of the *sea peacock*: and Ray has been inclined to rank them in the same family. But, though their voice and roosting is similar, their food, which is entirely upon greens, vegetables, and barley, seems to make some difference.

There is a species of this bird found in the southern parts of Africa and India, called the
Gigantic

Gigantic Crane, which frequently measures seven feet and a half, when standing erect, and from the tip of one wing to that of the other, fourteen feet ten inches. The head and neck are naked, and of a yellowish colour. The feathers on the back and wings are of an iron colour, those of the breast and belly of a dirty white. The craw hangs down on the fore part of the neck, like a pouch, and the lower part is hairy. These birds are gregarious, and when their wings are spread, appear like a number of canoes on the surface of the water. They may be easily tamed, and become so familiar, that a young one at the king of the Bananas in Africa became so troublesome, that the servants were obliged to guard the provisions by beating it off with switches; but notwithstanding this, it commonly purloined something, and one day was known to swallow at a mouthful a whole boiled fowl. It was accustomed to roost very high among the cotton trees, whence at two or three miles distance, it could spy the dinner carrying across the yard, and darting from its station, would enter promiscuously with the persons who carried in the dishes. It preys upon birds, reptiles, and small quadrupeds.

drupeds. On opening one of them a land tortoise, ten inches long, and a large black cat were found entire in its stomach.

The *Jabiru* and the *Jabiru Guagu*, are both birds of the crane kind, and natives of Brasil; we know little of them except the general outline of their figure, and the enormous bills which are preserved in the cabinets of the curious. The bill of the latter is red, and thirteen inches long; the bill of the former is black, and is found to be eleven. Neither of them, however, are of a size proportioned to their immoderate length of bill. The *jabiru guacu* is not above the size of a common stork, while the *jabiru* with the smallest bill exceeds the size of a swan. They are both covered with white feathers, except the head and neck, which are naked: and their principal difference is in the size of the body and the make of the bill; the lower chap of the *jabiru guacu* being broad, and bending upwards.

A bird still more extraordinary may be added to this class called the *Anhima*, and, like the two former, a native of Brasil. This is a water fowl of the rapacious kind, and bigger than a swan. The head, which is small for the size of the body, has a black bill, which is not above two inches long; but what distinguishes

tinguishes it in particular is a horn growing from the forehead as long as the bill; and bending forward like that of the fabulous unicorn of the ancients. This horn is not much thicker than a crow-quill, as round as if it were turned in a lathe, and of an ivory colour. But this is not the only instrument of battle which this formidable bird carries; it seems to be armed at all points; for at the fore part of each wing, and the second joint, spring two straight triangular spurs, about as thick as one's little finger: the foremost of these goads or spurs is above an inch long; the hinder is shorter, and both of a dusky colour. The claws are also long and sharp; the colour is black and white; and they cry terribly loud, sounding something like Vyhoo Vyhoo. They are never found alone, but always in pairs; the cock and hen prowl together; and their fidelity is said to be such, that when one dies, the other never departs from the carcase, but dies with its companion. It makes its nest of clay, near the bodies of trees, upon the ground, of the shape of an oven.

Another bird of this class, from the peculiarity of its manners is vulgarly called by our sailors the *buffoon bird*, and by the French, the *demoiselle* or *lady*. The same qualities have
procured



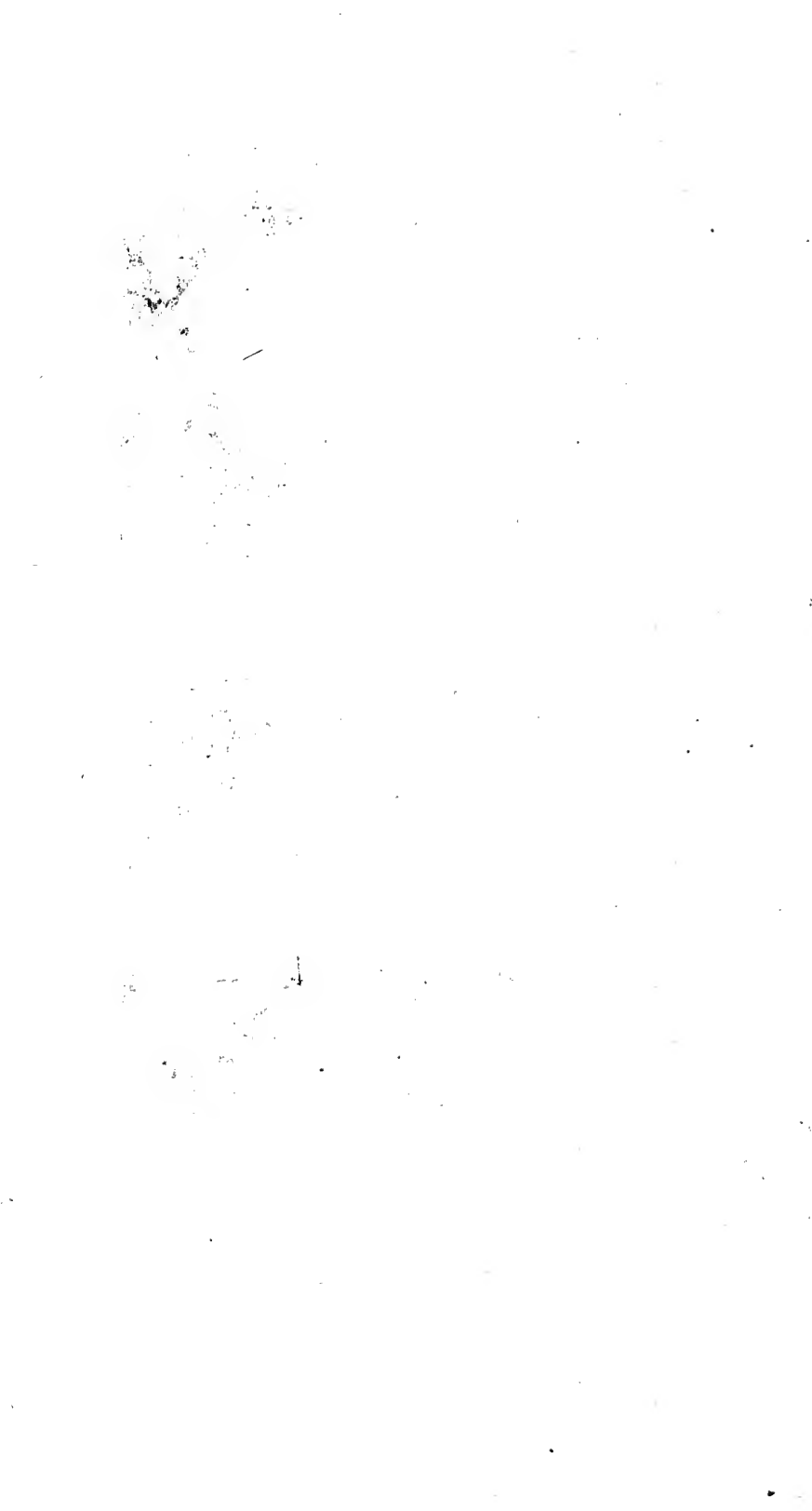
FIG. 71.

Spoon Bill.



FIG. 72.

Demoiselle.



procured it these different appellations from two nations, who, on more occasions than this, look upon the same objects in very different lights. The peculiar gestures and contortions of this bird, the proper name of which is the *Numidian* crane, are extremely singular; and the French, who are skilled in the arts of elegant gesticulation, consider all its motions as ladylike and graceful. Our English sailors, however, who have not entered so deeply into the dancing art, think, that while thus in motion, the bird cuts but a very ridiculous figure. It stoops, rises, lifts one wing, then another, turns round, sails forward, then back again; all which highly diverts our seamen; not imagining, perhaps, that all these contortions are but the awkward expression, not of the poor animal's pleasures, but its fears.

It is a very scarce bird; the plumage is of a leaden grey; but it is distinguished by fine white feathers, consisting of long fibres, which fall from the back of the head, about four inches long; while the fore part of the neck is adorned with black feathers, composed of very fine, soft, and long fibres, that hang down upon the stomach, and give the bird a very graceful appearance. The ancients have described

a buffoon bird, but there are many reasons to believe that their's is not the Numidian crane. It comes from that country whence it has taken its name.

The *Spoonbill* differs a good deal from the crane, yet approaches this class more than any other. The body is more bulky for its height, and the bill is very differently formed from that of any other bird whatever. Still, however, it is a comparatively tall bird ; it feeds among waters ; its toes are divided ; and it seems to possess the natural dispositions of the crane. The European spoonbill is about the bulk of a crane ; but the latter is above four feet high, while the former is seldom more than three. The common colour of those of Europe, is a dirty white ; but those of America are of a beautiful rose-colour, or a delightful crimson. Beauty of plumage seems to be the prerogative of all the birds of that continent ; and we here see the most splendid tints bestowed on a bird, whose figure is sufficient to destroy the effects of its colouring ; for its bill is so oddly fashioned, and its eyes so stupidly staring, that its fine feathers only tend to add splendour to deformity. The bill, which in this bird is so very particular, is about seven inches

inches long, and running out broad at the end, as its name justly denotes ; it is there about an inch and a half wide. This strangely-fashioned instrument, in some is black ; in others of a light grey ; and in those of America, it is of a red colour, like the rest of the body. All round the upper chap there runs a kind of rim, with which it covers that beneath ; and as for the rest, its cheeks and its throat, are without feathers, and covered with a black skin.

A bird so oddly fashioned might be expected to possess some very peculiar appetites ; but the spoonbill seems to lead a life entirely resembling all those of the crane kind ; and Nature, when she made the bill of this bird so very broad, seems rather to have sported with its form, than to aim at any final cause for which to adapt it. In fact, it is but a poor philosophy to ascribe every capricious variety in Nature to some salutary purpose ; in such solutions we only impose upon each other, and often wilfully contradict our own belief. There must be imperfections in every being, as well as capacities of enjoyment. Between both, the animal leads a life of moderate felicity ; in part making use of its many natural
T t 2 advantages,

advantages, and in part necessarily conforming to the imperfections of its figure.

The spoonbill chiefly feeds upon frogs, toads, and serpents ; of which, particularly at the Cape of Good Hope, they destroy great numbers. The inhabitants of that country hold them in as much esteem as the ancient Egyptians did their ibis : it runs tamely about their houses ; and they are content with its society, as a useful though a homely companion. They are never killed ; and indeed they are good for nothing when they are dead, for the flesh is unfit to be eaten.

This bird breeds in Europe, in company with the heron, in high trees ; and in a nest formed of the same materials. Willoughby tells us, that in a certain grove, at a village called Seven Huys, near Leyden, they build and breed yearly in great numbers. In this grove also, the heron, the bittern, the cormorant, and the shag, have taken up their residence, and annually bring forth their young together. Here the crane kind seems to have formed their general rendezvous ; and, as the inhabitants say, every sort of bird has its several quarter, where none but their own tribe are permitted to reside. Of this grove the
peasants

peasants of the country make good profit. When the young ones are ripe, those that farm the grove, with a hook at the end of a long pole, catch hold of the bough on which the nest is built, and shake out the young ones ; but sometimes the nest and all tumble down together.

These birds lay from three to five eggs ; white, and sprinkled with a few sanguine or pale spots. We sometimes see in the cabinets of the curious, the bills of American spoon-bills, twice as big and as long as those of the common kind among us : but these birds have not yet made their way into Europe.

Of this bird there is a very small species at Surinam, and which, though perfectly agreeing both as to shape and manners, scarcely exceeds the size of a sparrow.

The *Flamingo* has a just right to be placed among the crane species ; for although it is web-footed, like birds of the goose kind, yet its height, figure, and appetites, entirely remove it from that class of animals. With a longer neck and legs than any other of the crane kind, it seeks its food by wading among waters, and only differs from all of this tribe in the manner of seizing its prey ; the heron
makes

makes use of its claws, but the flamingo uses only its bill, which is strong and thick for the purpose, while the claws are useless, being feeble and webbed.

The flamingo is the most remarkable of all the crane kind, being not only the tallest, but the most bulky, and the most beautiful. The body, which is of a beautiful scarlet, is not bigger than that of a swan; but its legs and neck are of such an extraordinary length, that when it stands erect, it is six feet six inches high. Its wings, extended from tip to tip, are five feet six inches; and it is four feet eight inches from beak to tail. The head is round and small, with a large bill, seven inches long; partly red, partly black, and crooked like a bow. The legs and thighs, which are not much thicker than a man's finger, are about two feet eight inches high; and its neck near three feet long. Of what use its membranous feet are, does not appear, as the bird is never seen swimming, as its legs and thighs are of sufficient length for wading into those depths where it seeks for prey.

This bird was formerly found in great plenty on all the coasts of Europe, but it is now seen only in the retired parts of America. Its beauty,

beauty, size, and the peculiar delicacy of its flesh, have been such temptations to take or destroy it, that it has long since deserted the shores frequented by man, and taken refuge in countries that are as yet but thinly peopled. In these solitary regions, the flamingo lives in a state of society, and seemingly under a better polity than any other of the feathered creation, as has frequently been observed by those who have traversed that extensive continent; and who have taken repeated notice of the good order preserved in their retreats at the approach of man, whom they then consider as an enemy, by invading their territories, and in which they live in peace and security.

Albinus, indeed tells us, that when the Europeans first went to America, and coasted along the African coasts, they found the flamingos on several shores on both continents, gentle, and no ways distrustful of mankind.— They had long been used to security, in the extensive solitudes they had chosen; and knew no enemies, but those they could very well evade or oppose. The negroes and the native Americans, were possessed but of few destructive arts for killing them at a distance; and

and when the bird perceived the arrow, it well knew how to avoid it. But it was otherwise when the Europeans first came among them : the sailors not considering that the dread of fire-arms was totally unknown in that part of the world, gave the flamingo the character of a foolish bird, that suffered itself to be approached and shot at. When the fowler had killed one, the rest of the flock, far from attempting to fly, only regarded the fall of their companion in a kind of fixed astonishment : another and another shot were discharged ; and thus the fowler often levelled almost the whole flock, before one of them began to think of escaping. Experience, however, taught them better ; at present the flamingo is not only one of the scarcest, but also one of the shyest birds in the world, and the most difficult of approach. They chiefly keep near the most deserted and inhospitable shores ; near salt-water lakes and swampy islands. They come down to the banks of rivers by day ; and often retire to the inland, mountainous parts of the country at the approach of night. When seen by mariners in the day, they always appear drawn up in a long close line of two or
three

three hundred together; and, as Dampier tells us, present, at the distance of half a mile, the exact representation of a long brick wall. Their rank, however, is broken when they seek for food; but they always appoint one of the number as a watch, whose only employment is to observe and give notice of danger, while the rest are feeding. As soon as this trusty centinel perceives the remotest appearance of danger, he gives a loud scream, with a voice as shrill as a trumpet, and instantly the whole cohort are upon the wing. They feed in silence; but upon this occasion, all the flock are in one chorus, and fill the air with intolerable screamings.

But notwithstanding these assertions of Dampier, and others, that the flamingo at present avoids mankind with the most cautious timidity, it is certainly not from any antipathy to man that they shun his society, for Labat assures us, that in some villages along the coast of Africa, the flamingos come in great numbers to make their residence among the natives. They there assemble by thousands, and perch on the trees within and about the villages; and are so very clamorous, that the sound is heard at near a mile distance. The negroes are fond of their

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company; and consider their society as a gift of Heaven, and a protection from accidental evils. They feed, protect, and endeavour to render them every possible assistance. “ But my countrymen (says Buffon), who are
“ admitted to this part of the coast, cannot,
“ without some degree of discontent, see
“ such quantities of game, and that of the
“ most delicate kind, remain untouched, and
“ rendered useless by the superstition of the
“ natives; they therefore take every oppor-
“ tunity of killing them, when they find
“ themselves unobserved and at a convenient
“ distance from the villages; but they find it
“ very necessary to hide them in the long
“ grass, if they perceive any of the negroes
“ approaching; for they would probably
“ stand a chance of being ill-treated, if they
“ discovered that their sacred birds were thus
“ unmercifully treated, and destroyed for the
“ purpose of indulging the appetites of their
“ visitors.”

Before they became so exceedingly shy, and even now in some part of Africa, they are frequently shot by the mariners on the coasts, who also very often catch their young, although they run exceedingly fast.

Labat

Labat says, that he has frequently taken them with nets, properly extended round the places they breed in. When their long legs are entangled in the meshes, they are then unqualified to make their escape; but they still continue to combat with their destroyer, and the old ones, though seized by the head, will scratch with their claws; which, though to every appearance inoffensive weapons, very often wound their enemies; and even when they are fairly disengaged from the net, they preserve a natural obstinacy and ferocity: they refuse all nourishment, and peck and combat with their claws at every opportunity those who come near them; therefore, continues this author, there is an absolute necessity for destroying them when taken, as they would only pine and die, if an attempt were made to keep them in captivity. The flesh of the old ones is black and hard, though, Dampier says, well tasted; but that of the young ones is much better, and esteemed as excellent by many.—But, of all other delicacies, the flamingo's tongue is the most celebrated. “A dish of “flamingos' tongues (says Buffon), is a feast “for an emperor.” In fact, the Roman emperors considered them as the highest luxury;

and we have an account of one of them, who procured fifteen hundred flamingos' tongues to be served up in a single dish. The tongue of the flamingo, which is so much sought after, is a good deal larger than that of any other bird whatever. Its bill is like a large black box, of an irregular figure, and filled with a tongue which is black and gristly, and which has long been reckoned among the epicures as a most rare delicacy, from possessing a very pleasing and peculiar flavour. Be this as it may, we agree with a respectable author, who says—"It is probable that the beauty and scarcity of the bird might be the first inducements to studious gluttony to fix upon its tongue as meat for the table." What Dampier says of the goodness of its flesh, cannot so well be relied on; for Dampier was often in want of provisions, and at those times naturally thought any thing good that could be eaten, and possibly might estimate the delicacy of any fresh food in proportion to the wants it happened to supply; but even he, however, agrees with Labat, that the flesh is black, tough, and fishy; so that we can hardly give him credit, when he asserts, that the flesh of the flamingo is so delicious, that it can be formed into a luxurious entertainment.

The

The flamingos, as we have already observed, always go in flocks together; and when they change their situations, they do it in ranks, in the same manner as the cranes. They are sometimes seen, at the break of day, flying down in great numbers from the mountains, and conducting each other with a kind of trumpet cry, that sounds like the word *Tococo*, whence the savages of Canada have given them that name. In their flight they appear to great advantage; for they then seem to be of as bright a red as a burning coal. When they dispose themselves to feed, they cease their cry, and then they disperse over a whole marsh in silence and assiduity. Their manner of feeding is very singular: the bird thrusts down its head, so that only the upper convex side of the bill touches the ground; and in this position the animal appears, as it were, standing upon its head.

In this manner it paddles and moves the bill about, and seizes whatever fish or insect happens to offer. For this purpose the upper chap is notched at the edges, so as to hold its prey with the greater security. Catesby, however, gives a different account of their feeding; he says, that they thus place the
upper

upper chap undermost, and so work about, in order to pick up a seed from the bottom of the water, that resembles millet; but as in picking up this, they necessarily also suck in a great quantity of mud, their bill is toothed at the edges, in such a manner as to let out the mud, while they swallow the grain.

Their time of breeding is, according to the climate in which they reside: in North America they breed in our summer; on the other side of the line, they take the most favourable season of the year. They build their nests in extensive marshes, and where they are in no danger of a surprise. The nest is not less curious than the animal that builds it; it is raised from the surface of the pool about a foot and a half, formed of mud, scraped up together, and hardened by the sun, or the heat of the bird's body; it resembles a truncated cone, or one of the pots which we see placed on chimnies: on the top it is hollowed out to the shape of the bird, and in that cavity the female lays her eggs, without any lining but the well-cemented mud that forms the sides of the building. She always lay two eggs, and no more; and, as her legs are im-

moderately

moderately long, she straddles on the nest, while her legs hang down, one on each side, into the water.

The young ones are a long while before they are able to fly; but they very soon run with amazing swiftness. They are sometimes caught, and, very different from the old ones, suffer themselves to be carried home, and are tamed very easily. In five or six days they become so familiar as to eat out of the hand; they drink a surprising quantity of sea-water, and of which it is necessary to give them plenty. But though they are easily rendered domestic, they are not reared without the greatest difficulty; for they generally pine away, for want of their natural supplies, and mostly die in a short time. While they are young, their colours are very different from those lively tints which they acquire with age. In their first year they are covered with plumage of a white colour, mixed with grey; in the second year the whole body is white, with here and there a slight tint of scarlet; and the great covert feathers of the wings are black; the third year the bird acquires all its beauty; the plumage of the whole body is scarlet, except some of the feathers in the wings, that still retain their sable hue. Of these

these beautiful plumes, the savages make various ornaments; and they were formerly transported into Europe for the purpose of making muffs, but are at present almost in disuse, and preserved only as rarities by the curious.

END OF THE SECOND VOLUME.

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